

University of Calcutta

Journal
of the
Department of Letters

Vol. X VIII

891.05
J.D.L.



AHT
CALCUTTA UNIVERSITY PRESS

1929

CENTRAL ANTHROPOLOGICAL
LIBRARY, NEW DELHI.

Acc. No. 25929
Date. 21. 2. 57
Call No. 691.05 / J. 5. C.

PRINTED AND PUBLISHED BY BHUPENDRALAL BANERJEE
AT THE CALCUTTA UNIVERSITY PRESS, SENATE HOUSE, CALCUTTA

Reg. No. 383 B.J.—Jan. 1929—600

CONTENTS

	PAGE
1. Linguistics in India, by Prof. Sunitikumar Chatterji, M.A., D.Lit. (Lond.) ...	1—30
2. Nasalization in Hindi Literary Works, by Siddheswar Varma, M.A., D.Lit. ...	1—20
3. Aryabhata, the Father of Indian Epicyclic Astronomy, by P. C. Sen Gupta, M.A. ...	1—56
4. Women's Dialect in Bengali, by Sukumar Sen, M.A.	1—84
5. Aspects of Bengali Society, by Tamonash-chandra Das Gupta, M.A. ...	181—284
6. A Critical Study of the Songs of Jnanadas, by Biswapati Chaudhuri, M.A. ...	1—55
7. Vuttodaya, by R. Siddhartha, M.A. ...	1—54

LINGUISTICS IN INDIA*

BY

SUNITI KUMAR CHATTERJI, M.A. (CALCUTTA), D.LIT. (LONDON).

*Khaira Professor of Indian Linguistics and Phonetics,
Calcutta University.*

The All-India Oriental Conference is primarily a gathering of Indologists, and its Philological Section should in the fitness of things occupy itself mainly with the linguistic problems of India, Ancient and Modern. This however does not mean that the scope of our deliberations is restricted within narrow limits. For the linguistic problems connected with India are so many and so varied in their number and nature, and besides have so many links and ramifications outside India, that quite a vast field of enquiry presents itself as a matter of course. India has been a meeting-place of races, civilisations and languages ever since the dawn of history, and even earlier; she has been a veritable *Middle Kingdom*, into which so many different types of humanity, each with its particular language and culture, have converged. As extraneous elements introduced and naturalised in India they have their affinities outside. Then, again, the overflow of culture from India links the country also with many other and different types of culture, all of which were profoundly modified by India and even obtained a certain Indian colouring and character. The languages of all these extraneous cultures quite legitimately come within the domain of Indian Linguistics by virtue of their Indian

* Address delivered by the Author as President of the Philology Section of the Fifth All-India Oriental Conference held at Lahore, 19th-21st November, 1928.

affinities or connexions. Thus, with our Sanskrit and our Indo-Aryan languages we are connected with the Indo-European world of the West, and extra-Indian Indo-European languages in their earlier phases form a part of the problems of Vedic and Sanskrit; our Dravidian is so far unique, but scholars have been searching for its affinities from Australia to the Ural-Altaic domain and to Asia Minor and the Mediterranean region; our Kol (or Munda) speeches are cousins of the Mon-Khmer languages of Indo-China, and of the Indonesian speeches of Malaya and of the islands beyond; the Tibeto-Burman dialects of India bring in problems of the Sino-Tibetan family; and the extinct languages of Central Asia as well as the speeches of Indo-China and Indonesia touch the fringe of Indian Linguistics through Sanskrit (and Pali) having been their inspirer and feeder. Besides, general problems of Linguistics referring to the various physiological and psychological aspects of speech can as a matter of course form the subject of our discussions whenever they have the least bearing on our Indian languages. The field is thus so vast and unlimited that we can venture to till only a corner of it—the corner of which the terrain and the soil are known or expected to be known to us through our being born in it and living within it, or through our special intimate study of it.

We meet here firstly to take stock of the progress made in India and outside India in the corner of the field we are directly interested in—namely, the languages of India. But so far workers have been so few and real progress made in India so small that for the present in discussing linguistic studies in our country we have to talk more about the *desiderata* in the different branches of Indian Linguistics than about our actual achievements. The advance that has been made so far lies largely to the credit of a few European scholars who have made the subject their own. Our

meetings will consequently be, at least for some time to come, more concerned with the discussing of our plans than with other things. We shall of course be toiling, each man at his plough in his particular furrow, and the results of our investigations we shall try to make known to our fellow-workers. And when we meet each other at gatherings like the present one, we shall have occasion to ask ourselves the question—*api tapō vardhatē?* Is our fervour and our endeavour increasing? We shall then have the opportunity of placing before our *confrères* the problems with which we may be occupied at the moment and have the advantage of their opinions and criticisms on our methods and conclusions : we shall thus be enabled to exchange notes, and to benefit through personal touch with kindred spirits, in a circle which is still restricted and select.

Compared with the other Sciences and Arts, Linguistics as a Modern Science is of recent growth, and is still new to our country. Europe of course received the impetus from the discovery of our Sanskrit, and an additional impulse she derived from the study of the Ancient Indian phoneticians and grammarians whose works were a revelation in speech analysis. But while the Modern Science of Comparative Philology originated and was developed in Europe in the course of the nineteenth century by bringing in the historical and comparative method in explaining the facts which were being collected and correlated, India pursued her traditional methods of studying her classical language, methods in which the crystal stream of critical observation which had led to the foundation of Ancient Indian grammar was well-nigh lost sight of underneath the overgrowth of later scholasticism. The traditional method nevertheless was thorough; and this was natural enough when culture and study was as a rule bound to be limited and intensive; and the scientific basis of this

traditional method also acted as a powerful leaven. The first enquirers who analysed the ancient Aryan speech of India were no doubt pioneers, free from the burden of a stereotyped tradition and from the theological *impedimenta* that came in later. Their interest was certainly one of scientific curiosity, although in the unconscious way of all primitive searchers after truth. This was followed by a highly intellectual and self-conscious spirit of research which sought to push the haphazard enquiries started previously to their logical end in a highly specialised field. The climax of this outlook we find in Pāṇini's method. A scholastic and theological attitude soon followed, and has ever since been in possession of the field of linguistic study among our old-type scholars. The wonder, the delight and the freshness of spirit which unquestionably accompanied the first Indian grammarian's analysis of the word into syllables and sounds, or into roots and affixes, was a lost world, when the spirit of enquiry could not keep pace with the progress of a living speech, and the grammar of a dead language became merely an art of language, a discipline for its own sake, as well as a handmaiden of religious ritualism or of theological subtleties. One cannot however presume to decry or belittle the work of the ancient and medieval Sanskrit grammarians. The ancient Rishis, the path-finders, laid the foundations of Sanskrit grammar, and the example they set in taking a proper stock of the language was rigidly followed by their successors. Scholars concentrated on the Sanskrit language and its usage, and the extraordinary intellect of Patañjali and others being brought to bear upon a description of the language and its detailed analysis, we have as a result a grammatical system for the classical language of India unrivalled in its accumulation and accurate description of facts and in the thoroughness and detail of its technique, which still continues to be one of the foremost

intellectual achievements of India. But apart from those of the linguistic speculations of the Hindu grammarians of old which sought to find out the nature of language (as typified by Sanskrit) as a phenomenon, and discussed its *rationale* from point of view of one or other of the different systems of philosophy, linguistic studies properly so-called ran along fixed grooves in India—as in all countries in ancient and medieval times. Language study either resolved itself into the Art of Grammar, which aimed at the efficient acquirement of a sacred and antiquated language through a long and rigid course of study; or it became a scholastic philosophy with a tacit acknowledgment of some accepted dogmas or theories as a necessary background for speculation. Even when it became necessary to handle the Prakrit dialects which unfolded the development of speech as a living process, and even when there was contact with foreign speeches like Persian and Greek—a contact which is so conducive to the initiation of new ideas,—with a new scholasticism, as well as an attitude of aloofness from the outside world which a rapidly freezing orthodoxy, the daughter of theology, was engendering, the foundations of historical and comparative grammar could not be laid in India; and it was a great chance missed, for the times and the spirit were both propitious. The work of the old-time Indian grammarians and speculators in the philosophy of language has nevertheless an honoured place in the history of the evolution of the linguistic science, and has ample historical justification. But a true science of language such as we understand it to be at the present day was as yet far away in the womb of the future—a science which could have access to all the aspects of the question and would collect facts from every side, and compare them and place them in their mutual relation, and supply links and hypotheses giving the history of a process. The dynamic side of language as an expres-

sion of life, which was altering with the passing centuries as the circumstances of life itself were altering, could not be expected to be clearly seen in ages which had not as yet evolved the historical sense among scholars. It was the static aspect of an unchanging norm that presented itself before linguistic enquirers who had very little notion of human history. The historical and comparative method is a new discovery. Its gradual perfection is of epoch-making importance, as it has completely altered our outlook on the cultural evolution of man in all that concerns him, including language. Proper methodology in the study of speech has been slowly evolved during the nineteenth century; and taking the fullest help as it has from kindred sciences, it would seem that in its broad principles the modern method has come to stay,—unless some revolutionary Law of Relativity were to be discovered in the physiological and psychological world with which language has to do.

Science is one, and it is not of the East or of the West. It is because certain things which are of universal application have been discovered within recent times in Europe, we would not be justified in labelling them as *European* and in regarding them as irremediably foreign, which cannot be ours. This is more true of the things of the intellect, of the spirit. In the sum total of human progress, each people brings its contribution while it is in the hey-day of its intellectual life. The torch is passed on from race to race. So that the light kindled in a corner of Northern India—in this very Land of the Five Rivers—some two thousand five hundred to three thousand years ago, has been kept burning, and in the hands of Modern Europe it is shedding its effulgence with a brilliance greater than ever. And we that have felt drawn by that light should regard ourselves thrice happy, and consider a great part of the purpose of our earthly sojourn (on the intellectual plane) to be

fulfilled, if we can bring it back once more to our motherland and illumine with new splendour our country's multiform palace of speech, and explore with the help of this light from the West all its nooks and corners for the first time in history.

Our outlook is frankly modern, and European,—and yet it is Ancient Indian. For if the intellect of Ancient India stood for anything, it was for an uncompromising search after truth : and that is also the attitude of Western or Modern Science. The reward of this attitude is itself—it is the intellectual satisfaction, the joy of the dry white light of the intellect. I do not here consider the romantic pleasure in studying speech as a fact of evolutionary history, and the mystic sense in speech, which are present nevertheless in many investigators. And if we are to make a declaration of the doctrine which guides our work as well as the manner of our approaching the problems in our subject, we must admit with due emphasis that our methodology is also modern, and European. In the physical sciences, this modern or European method is the only method. In our science of Linguistics, too, where cause and effect take part equally, the soundness of the modern method is an attested fact. I need not explain the obvious, and before initiates, too. For language investigation, the outstanding characteristic of the modern method is comparison. We cannot remain *kūpa-maṇḍūkas*, the proverbial frogs-in-the-well, in any domain of life and in its manifestations in art and science, and much less in a human science like ours. For the enquirer who will gather facts and find out laws, comparison is essential—indeed, it is a part of the facts themselves. We are to work, each of us according to his ability, his preparation and his gifts, in studying the languages of India according to the modern methods. Our attitude towards the workers in the traditional way, towards our *Paṇḍits* and *Śāstrīs*, *Bhikkhus* and *Lamas*, *Dasturs* and *‘Ālims*,

is one of respect and co-operation and fellowship in a field of common studies. They have earned the gratitude of the civilised world by their conserving the heritage of the past, but owing to altering circumstances the ideal type representative of their scholarship is becoming rarer and rarer. It is a matter of profound regret that the old type of scholarship cannot exist much longer. We honour and appreciate their intensive knowledge of the tradition, which alone can unlock many a precious truth about the past. We come after them, and we seek to arrange and explain, according to what we consider the right lines of exposition, the traditional information that they have zealously preserved for mankind. The modern philological, historical and comparative method of interpreting the Veda, for instance, we consider to be the only right method; but this method can never withhold from the tradition the respectful attention which is its due, and at every step it must make its reverential and grateful obeisance to Sāyana and the old *Ācāryas* as ancient path-makers. The modern method is the inevitable off-spring of the Time-Spirit, and the old scholars were the conservators who made the modern method possible; and all respect and gratitude also to the living scholars who embody in themselves the spirit and the learning of the *Pūrvācāryas*, the masters of the past, and still seek to follow in their footsteps.

It must be admitted that the importance of Linguistics is not generally realised as much as the science really deserves. Intensive students of a classical language, whether in the East or in the West, have generally a very vague idea of the linguistic science. And since it is not a part of the tradition in which they have been trained, they are suspicious of it, as if the subject were an intruder in their field of studies, and claimed more attention than it honestly deserved. In justice, it must be admitted that at first there was

room for suspicion. For, this newly rising science in the hands of many a scholar, more enthusiastic than sober, often behaved like a veritable *enfant terrible*, paying but scant respect to the age and prestige of tradition when it was out in its career to conquer the world. Its attitude was that of a Macaulay with the famous pronouncement that a shelfful of English books was worth the whole literature of India and Arabia. When language study properly so-called began to question the propriety of the traditional views and methods of "Philologie," it could not expect itself to be received with acclamation by orthodox scholarship; and when it became self-assertive, it was branded as a *parvenu*. A traditional repugnance was bound to grow up against it, from which it could become free in Europe itself only gradually. In Europe the greater spread of cultural education was partly responsible for it; and language study, especially of the classical languages, had to ally itself with this new science, whose power had to be acknowledged, to save itself from the onslaughts of the demand for scientific and technical education. In India, within the hot-house atmosphere of our universities, we are still in a backward position, as can be expected. Orthodox *Pandits* and scholars of Sanskrit are apathetic, and frankly contemptuous where they find the results of Linguistics to go against the traditional view. Among our "English-educated" groups, the attitude certainly is not up-to-date and reasonable. Familiarity is said to breed contempt, but here the want of familiarity has done it. In our seats of learning, the linguistic science has had to seek admission by the back door, and with many apologies. Some place had to be made for it, to keep up appearances; and half a paper or less would be relegated to "Philology" in our advanced courses in a classical language like Sanskrit, or in English, and our pundits, whether in English or in Sanskrit, would all the while consider it a nuisance, and often

frankly train up their pupils in that attitude. Only in this way some room could be made for the science. So long there were few to waste any tenderness over it, and there was not much advocacy for its cause either, by any striking or convincing demonstration of its value as a mental discipline and as a pathway of investigation into problems of vital interest in the cultural life of the country. Yet the indebtedness to it of most of the other human sciences that have come into being or have come to be established during the last quarter of a century or half a century should have been given a wider recognition. But Comparative Religion, or Ethnology, or Psychology, is not a popular subject. The importance of Linguistics not being obvious, there is only an imperfect appreciation of its cultural and disciplinary value. Then again, the findings of Linguistics in the domain of the past history of the race are often apt to be disconcerting. Where a general tendency has been towards a passionate exaggeration of the glories of the past which are made to loom large in our intellectual horizon, with a magnitude invested on them by a conscious or unconscious patriotic or theological bias, anything which challenges that tendency brings with it an instinctive shock of repugnance. It is thought improper and unwholesome if it does not subscribe to shibboleths which have acquired the force of creeds. 'Hindu or Vedic civilisation—the oldest civilisation in the world,' 'Rigveda—the oldest book of the world,' 'Sanskrit—the mother of all languages,' 'India—the mother of all civilisations,' and such other uncritical statements which by constant repetition have obtained the importance of unquestionable and incontrovertible truths, began to be openly assailed by this new science of language, and this cannot be expected to mitigate the antagonism to it. But the scientific outlook is uncompromisingly for the truth that is arrived at by the scientific or logical method. A little judicious pandering to

national or religious vanity may be thought to be helpful in inspiring people to patriotic action, but the attitude of the man of science is in favour of the clear light of Truth, and nothing but the Truth, so far as it is possible for human reasoning to find it out, as the only right solution or fulfilment of practical difficulties or desirable aims. The words of Patañjali—*satya-dēvas syām ity adhyēyam vyākaraṇam*—in their literal and not their theological sense (namely 'Grammar is to be studied that I may have Truth for my deity'), form a fitting motto to guide students of the science of speech.

But the case for Scientific Linguistics is not so desperate in India. It is after all creating an interest. The Spirit of Curiosity is abroad, and she is opening wide the doors and windows of our mind for air and light from the outside. We are confident that our science is going to have its rightful place among the intellectual endeavours of our country. The number of scholars who are devoting their energies in qualifying for working in it is slowly but steadily on the increase. The earnestness and enthusiasm of the new band of workers gives the highest promise for the future of the science in the country. The foundation of a *Linguistic Society of India*, in which all serious workers in Linguistics might group themselves for mutual help and corporate action, was a pious wish of ours to which Dr. I. J. S. Taraporewala as Chairman of the Philological Section of the Second Oriental Conference at Calcutta gave expression in 1922; now, thanks to the initiative of a group of scholars in the Panjab, what we have been wishing for and talking about has become an accomplished fact, and we have at last an infant *Linguistic Society of India*. The starting of this Society, which, let us hope, will bring together all the serious students of language in India working along scientific lines, I consider a great and a significant advance for the Science in our country.

In Europe, the advances in Linguistic Science were made through the study of both the living and the classical languages, but it was more through the older languages than the modern ones that the greatest progress was achieved in the initial stages. A great many of the most suggestive discoveries were made in the field of Sanskrit, Greek, Latin and Gothic and of the older phases of the Modern European Languages; and some of the greatest names in the domain of Linguistics are connected with the ancient languages. The comparative study of the formal aspect of the older languages with a view to find out their genetic relations was thus more conducive to the development of the Science than anything else, at least during the earlier part of its history, when there was a considerable romantic interest in the study of speeches of folks of olden days, the Vedic Āryas, the Hellenes of Homer, the Romans, the Germans, the Celts, ancient peoples with a certain heroic glamour about them. Now the study of the ancient and of the modern speeches go hand in hand in Europe. But the history of Linguistics in India was the other way about. The sole classical language, Sanskrit, formed the life study of the old type of scholars, and the traditional method they followed was a *cul-de-sac* for modern philology. The old grammarians seemed to have done everything: since, by far the largest percentage of words in the language were given satisfactory etymologies, and the last analysis to roots and affixes was an accomplished fact, and analysis apparently could not proceed any further. Doubtful etymologies, however, remained doubtful, if scholastic explanations were not acceptable. Where so much was given, it was ungracious to ask for more. And the new outlook was absent, to view the problems properly, and to make the right sort of enquiries. There was ground for some sort of satisfaction for the student of the Language of the Gods, thanks to the labours

of the Rishis and the *Ācāryas*. But the Modern Indian Languages were crying for attention, only there was none to hear them. So much there was which was not explained. And the Prakrits were in the middle, between the language of the Age of Gold on the one hand and those of Āryāvarta of the present Age of Iron on the other. The Prakrits were tantalising with their suggested explanations. So that it was no wonder that the first great linguistic scholar of Modern India,—a scholar who was saturated with the Sanskrit tradition—should, with a rare scientific curiosity, turn his attention to the vernaculars, and should set about trying to tell the whole history of their origin and development. Ramkrishna Gopal Bhandarkar just fifty years ago laid the foundation to philological studies in our country in his *Wilson Philological Lectures* of 1877. But his has remained the solitary Indian name of any real eminence, embracing at one sweep so many different aspects of Indian 'Philology.' While the *Junggrammatiker* were revitalising the Science of Linguistics in Europe with their new ideas and methods, and the study of the new as well as the old languages received a fresh impetus, a handful of European scholars like Beames, Hoernle, Lyall, Trumpp, and finally, Grierson, fell under the spell of the Aryan vernaculars, and created, conjointly with Bhandarkar (whose work and that of Beames were practically contemporaneous), the Comparative Philology of the New Indo-Aryan Languages. The inauguration of the *Linguistic Survey of India* by the Government of India in 1903 with Grierson as its director, which after a quarter of a century has at last been happily completed early this year, has been a great measure for the advancement of philological research in India, and has prepared the ground for a newer generation of workers. The accurate description of the living speeches, and their proper classification in the *LSI.*, has helped to clear away

a great many fantastic notions among people in India and outside India about the real linguistic situation in our country. The work has been the source of a great impulse for philological studies and researches in India. Grierson's researches into the various vernaculars of India in their origin and their present state, into the Prakrits, into the borderland languages, represent a great deal of the work of permanent value which has been done in this field. And Grierson's example has been emulated by another small group of European scholars who have taken up the Modern Indo-Aryan languages, conspicuous among whom are Jules Bloch and R. L. Turner; and we must mention also L. P. Tessitori, whose premature death is an irreparable loss to Indian Linguistics.

I need not enter into details about the work done in the other families of speech in India—Dravidian, Austro-Asiatic (Kol or Munda etc.), and Tibeto-Chinese. Here, too, beginning from the middle of the last century, almost all the names are European: Max Mueller, Caldwell, Hodgson, Graul, Kittel, Gundert, Pope, Forbes, Campbell, Skrefsrud, Thomsen, Bodding, Hoffmann, Sten Konow, Nottrott, Vinson, Hahn, Bray, and the rest. Work in this field, however, has been rather tentative. The problems of the Dravidian languages would seem to require rehandling with a new outlook which will not pin its faith on the assumption that Tamil best represents the Old Dravidian *Ursprache*. For Kol, the enquiries of the type instituted by Bodding for Santali will be of far-reaching importance; and the researches of Jean Przyluski in connexion with the cultural contact between the Aryan world and the Austro-Asiatic world are just opening out for us a new vista about the origin of the Hindu people and Hindu culture of Northern India, which may be pronounced to be epoch-making in its significance.

The reproach that Indians do not take any interest in their own languages is not true any more, thanks to the spirit of national awakening which is urging upon the necessity of progress in every line. Interest in the vernaculars and in their older literatures, the study of which inevitably led to the study of their philology, brought about the foundation by the people of Societies like the *Vaṅgīya-Sāhitya-Pariṣad* of Calcutta, with branches all over the province of Bengal, of the *Nāgarī-Pracāriṇī-Sabhā* of Benares, of the *Tamīl-Sangam* of Madras, and of similar associations in the other language areas. The work done by them, although in the by-ways of vernacular text-criticism and philology, is not to be neglected. Then, most promising of all, during the last two decades the Indian Universities have been taking a more lively interest in the Modern Indian Languages. The winning of the Nobel Prize for Literature in 1913 by Rabindranath Tagore, who writes first in his mother tongue Bengali, and then translates into English; the pressing of the claims of Hindustani from the Congress platform as the *Rāṣṭra-bhāṣā*, the *Qaumī Zabān* or National Speech of India to take the place of English which is the present bond of union among the educated people from the different provinces; the sense of provincial patriotism which is flowing as an under-current in the political life of a United India; the feeling that for mass education, for which the demand is becoming more and more insistent, the provincial vernacular should be the medium; the foundation of the Osmania University at Haidarabad with an Indian language, Urdu, as its medium; all these, and other reasons are giving a new importance to the vernaculars in popular thought and sentiment, which is finding its way and leavening the policy of the Universities. The necessity for a systematic study of the Indian Vernaculars is being acknowledged everywhere; and the ultimate result of it all will be highly

advantageous for the advancement of Philological Research in India. The University of Calcutta took the lead in this matter, under the guiding hand of the great Sir Asutosh Mookerjee; and here we have a true nucleus of a School of Modern Indian Languages. The University of Madras started the Readerships in Dravidian Philology which it is to be regretted were not made a permanent institution; but the *Tamil Lexicon* it is bringing out will be an abiding testimony to the spirit of research into the Dravidian languages inaugurated by the University of Madras. The new spirit is manifest everywhere. And the University of Lahore, in addition to the vernacular section of its oriental department, is noteworthy in possessing a department of Experimental Phonetics, being the first Indian university to do so.

This brings to my mind the question of the importance of this branch of linguistic investigation. We are slaves of the written word; and although in India and in Europe we do not use pictograms or ideograms but alphabets of a phonetic character, experience has shown that even among fairly educated people it requires some thinking to realise the value of the spoken word and to comprehend the nature of the written word as a symbolisation of sounds. Many people are not usually able to shake off the fetish of the orthographical form. Common sense is the most uncommon thing in the world, and it was with rare common sense that Patañjali laid down the following definition of a word—*pratīta-padārthakō dhvanir lōkē śabda ucyatē.....dhvaniś śabdaḥ* (' the sound by which an object is made out is called the word : the sound is the word '). The keen phonetic sense of India never forgot this dictum in ancient times : hence we have a rational system of spelling which shows a rare understanding of the sound elements of speech. This system obtains for Sanskrit and the Prakrits as preserved in MS. literature, as well as for most of the Indian

languages, except in the case of a few like Bengali which at some unpropitious moment evinced a desire to emulate Sanskrit. It is this absence of the phonetic sense aided by a conservative spirit that is responsible for the system (or the want of it) in English spelling and in Modern Irish spelling than which it is hard to conceive of anything more intricate. The necessity of phonetic analysis as a basis of language study is being rapidly recognised in Europe and America, and Experimental Phonetics has come into being, to aid the Science of Linguistics. This movement is also slowly filtering down to India. The Present is but a transformation of the Past, and only when we thoroughly understand the Present, we can attempt to find out in what way was it embedded in the bosom of the Past. Phonetics enables us to get at the real form of the spoken word; and it is the oral transmission which is the vital thing, not the grammarian's orthographic representation of an archaic or theoretical pronunciation. A fine shade of a vowel or consonant sound, a slight difference in tone, in fact all subtle *nuances* in articulation which are apt to be ignored or misrepresented in the traditional orthography, are caught in their proper character by phonetic investigation, and are faithfully transcribed and registered. Frequently it is these delicate shades of articulation that suggest or reveal to us some hidden aspect of the history of the language. Unknown and unsuspected things show themselves to the enquirer, bringing him the joy of discovery in reward of his patience. We thus find sounds not contemplated by the ancient Indian system of writing occurring in the diverse and distant dialects. The tones in Panjabi and Lahndi in connection with the *h* sound, the stops with accompanying glottal closure in Sindhi and in some forms of Bengali [g' j' d' d' b'] are instances in point. When and how did these sounds originate? The finding of these sounds is certainly intriguing. The phonetics of

a modern language is indissolubly linked with its history, with the character of the earlier forms of speeches connected with it, speeches preserved only in written documents. To complete the *Linguistic Survey of India*, a fresh survey, rigorously up-to-date in its phonetic side, is becoming imperatively necessary. In this matter, linguistic research in India presents a terrain which is both vast and little explored, where there is room for many workers for a good number of years; and this field promises to be most fruitful with but little labour. Already detailed study has commenced in some of the more important languages by scholars working more or less independently—in Tamil, in Bengali, in Malayalam (from L. V. Ramaswami Aiyar), in Hindustani (T. Grahame Bailey and Daniel Jones), in Marathi (S. Kanhere and Lloyd Jones), in the languages and dialects of the Panjab (T. Grahame Bailey, Banarsidas Jain and Siddheswar Varma, the last scholar's analysis of the phonetics of Lahndi which has been taken up for publication by the Asiatic Society of Bengal is one of the most detailed and scientifically valuable), in Shina (T. Grahame Bailey and D. L. R. Lorimer), in Santali (P. O. Bodding), and in some of the speeches of Burma (R. Grant Brown, Pe Maung Tin and Miss Liliastrom). For a proper historical investigation of a language, an accurate statement of its facts both phonetic and morphological (the latter itself dependent on the former) is the first essential thing. Herein is the scope for immediate and intensive work : and I am glad to note that the newly founded *Linguistic Society of India* having a number of trained phoneticians among its organisers has already turned its attention to this branch of Linguistics. In this connexion, I would make an earnest plea for conformation to a standard system of phonetic transcription. The alphabet of the *International Phonetic Association* appears to be best suited for this purpose. It is based on

the Roman alphabet, and it avoids the cumbersome diacritical marks as much as possible, preferring entirely new letters; and it has become more largely accepted than any other system of phonetic writing. Auxiliary Devanagari or Bengali phonetic scripts may be helpful for workers not familiar with the English language or the Roman script. But I would insist upon a knowledge and an appreciation of the Roman or European system of writing in connexion with phonetic and other linguistic work even from workers of the type of our *Pandits* and *Maulavis*, who must be made to learn it. Like the symbols like K, Na, S, Au, Fe etc. for the elements in Chemistry, the symbols, like [k, t, u, ə, x] etc., for definite types of speech sounds should also be international. Just as in teaching Chemistry through Hindustani I would not write H_2SO_4 as $हरसओः$ or $ه س ر م$, so in treating of the sounds of speech in general, or of a particular language and dialect in special, I would insist upon the use of a well-known international graphic system like that of the *International Phonetic Association*. Of course, what I say is the ideal that we should have before us; but just as the ideal of the Roman script for all the languages of the world, including our Indian languages, would seem to be impossible of attainment now, and as the next best thing I would advocate the alphabetical unity of our own country through the common adoption of the Devanagari alphabet by all languages and dialects, so with a view to obtain our materials with the help of workers not at home in a system other than the one in which they received their training, I would welcome auxiliary phonetic scripts on the basis of the Devanagari and other Indian alphabets.

Our meetings, as I have said before, should take stock of the advance made in Indian Linguistics from session to session; and incidentally, we can draw attention to what enquiries should be

taken in hand immediately in the interest of the most important linguistic problems of our country.

We might first of all take up the Aryan languages of India as the most important group. Since the publication of Bloch's work on Marathi and Turner's article on Pitch Accent in Marathi, Modern Indo-Aryan Linguistics may be said to have entered a new phase, the earlier phases being represented by Bhandarkar, Beames and Hoernle, and by Grierson. The application of Phonetics to linguistic research and the study of the dialects by Indian workers show that linguistic investigation has taken the right lines of development in our country. Two scholars of the Panjab have taken up their own dialects furnishing full and accurate descriptions of them and seeking to indicate the lines of their development. We are eagerly awaiting the publication of Dr. Banarsidas Jain's book on Panjabi, and Dr. Siddheswar Varma's study of the Phonetics of Lahndi. Dr. Varma's study of Bhadrawahi, a Western Pahari dialect spoken in Kashmir state, promises to be of unique interest. Mr. Baburam Saksena is engaged in preparing his work on the history of Awadhi : we can expect it will be of great value, judging from Mr. Saksena's excellent little monograph on Lakhimpuri, and his papers on the language of Tulasīdāsa. A young friend of mine, Mr. Gopal Haldar, has written a very good study of the phonetics of the Noakhali dialect of Bengali which will be published by the University of Calcutta as the second of the ' University of Calcutta Phonetic Studies.' Mr. Basanta Kumar Chatterji's monograph on the Birbhum dialect of Bengali has been ready some time ago, and we expect it will be published duly. For Old Western Rajasthani, a worthy successor of Dr. Tessitori has come to the field : Dr. Charlotte Krause whose edition of *Nāsaketarī Kathā* is a noteworthy production.

An important work on that comparatively neglected branch of Indo-Aryan, a branch which is practically ignored by Indian students of Indo-Aryan—namely, the Romani or Gipsy branch—is Dr. J. Sampson's *Dialect of the Gipsies of Wales*, which appeared from the Oxford University Press in 1926. This great work, the result of thirty years of labour, has preserved for science a distant Indo-Aryan speech which is on the way to extinction; and since the time of Miklosich and Paspatis, it is the greatest work on Romani. It gives the phonology of the dialect and includes a history of the Romani sounds with reference to Old Indo-Aryan (Sanskrit), in this way connecting Romani with Middle Indo-Aryan and with the Modern Indo-Aryan languages; it gives also along similar lines the morphology of Romani. We have here something comprehensive in the way of the historical study of Romani as a language of Indo-Aryan origin. As Dr. Jules Bloch says of the work: 'l'indianiste n'a donc qu'à approuver la méthode de M. Sampson et à le remercier d'avoir bien voulu adapter lui-même son travail aux besoins de la philologie indo-aryenne.' This work should create an interest in Romani in India. As a pendant to the work, mention should be made of the important paper of Dr. R. L. Turner on 'the Position of Romani in Indo-Aryan' (*Journal of the Gipsy Lore Society*, Third Series, Vol. V, No. 4, 1926), which is a noteworthy contribution to the question of Romani affinities in India. The current view about the affinities of Romani is that it is connected with the Dardic speeches, but Dr. A. C. Woolner first questioned this connexion, and suggested another relationship. Dr. Turner, in this monograph of his, first exposes his methods, then places his facts and finally concludes that Romani is connected with the Central Group of Indo-Aryan speeches which excluded the ancestors of Sinhalese, Marathi, Sindhi, Lahndi, Panjabi, Western Pahari and Dardic,

and probably also Gujarati and Bengali; subsequently in the course of its migrations, the proto-Romani dialect became influenced by the North-Western Group of Indo-Aryan. Dr. Turner suggests further that the separation of the source-dialect of Romani from the Indo-Aryan branch took place before the 3rd century B. C. Dr. Turner's paper is most suggestive, and the matter requires more detailed working out. A great many problems of Middle Indo-Aryan are connected with the origins of Romani.

A bone of contention in Indo-Aryan Linguistics is the place of the Dardic speeches within the Aryan or Indo-Iranian branch, whether they are a distinct and a third group beside the Indo-Aryan and the Iranian, as Grierson has maintained, or whether they belong really to the Indian group, as most other scholars from Sten Konow downwards think. Dr. George Morgenstierne, the Norwegian Iranist and Indianist, has brought up the question again; and we may hope that his personal researches into the languages of Afghanistan, where he has collected an important mass of material in the Dardic languages, will help to solve the problem finally. In his introductory 'Report on a Linguistic Mission in Afghanistan' (Oslo, 1926), where he has given a clear survey of the various languages of the country, he has indicated his position, and he definitely ranges the Dardic speeches with Indo-Aryan. It will be admitted however that the Dardic speeches do present in their phonology and morphology divergences from the Modern Indo-Aryan languages of the plains. Their development, if really from the Old Indo-Aryan (Vedic), would seem to have been in isolation from that of the rest of India. Indeed, it will mean that Grierson's postulation of an independent, or third, Dardic group of Aryan will have to restate itself as a separation of Dardic from Indo-Aryan at a comparatively early date and its subsequent free and isolated development.

The publication of Dr. Morgenstierne's texts and his grammars and notes are awaited with the greatest interest. In the meanwhile, Colonel D. L. R. Lorimer's notes on Shina Grammar, Dr. Grahame Bailey's Shina Grammar, and Sir George Grierson's Kashmiri Dictionary now nearing completion and his editions of Kashmiri texts like *Hatim's Tales* and the *Kṛṣṇavatāra-līlā* indicate the most recent advances in Dardic studies.

In the field of Modern Indo-Aryan, the work that should be taken up immediately is the exact description of as many dialects as possible, with special attention to the niceties of phonetics. The best way to arrive at a morphological analysis of a spoken *patois* is to have as many *genuine* texts as possible—folk-tales (which may be a little archaic), personal narratives, actual conversations, proverbs, songs and poems,—and then to work out the grammar patiently. This is a task in which the actual speakers of the dialect (or of a dialect which is near enough) should be able to obtain the best results, at least by gathering good masses of material, with literal translation. For doing the phonetic part properly, the collector of the material should have some phonetic training, which is essential. Editions of old texts should be another item, editions which keep a proper guard on exact reproduction of the MS. where it is a single one, or on a proper collation of MSS. in which the oldest readings are paid due attention.

As old texts help to show the development of the speech, the question of these leads us to the earlier phases of Indo-Āryan, namely, to Middle Indo-Āryan (Prakrit) and Old Indo-Āryan (Sanskrit). We have not much work to boast of here. Since Jacobi's editions of the *Bhavisatta-kaha* (1918) and the *Sanat-kumāra-carita* (1921), and of the former work (*Bhavisayatta-kahā*) by C. D. Dalal and P. D. Gune in the Gaekwad's Oriental Series

(1923), an important find of late Middle Indo-Aryan (*Apabhraṃśa*) MSS. has been made in the Jaina monastery libraries at Karanja in Berar by Rai Bahadur Hiralal and Mr. Hiralal Jain. These have been brought to the notice of the learned world in Rai Bahadur Hiralal's 'Catalogue of Sanskrit and Prakrit Manuscripts in the Central Provinces and Berar' (Nagpur, 1926). A vein of rich ore for both Middle Indo-Aryan and New Indo-Aryan has been struck here. Sir George is continuing to give us the results of his wonderful scholarship in Prakrit also. We have to thank him for the *Prakrit Dhātvādēśas*, and also for his edition of portions of the *Prākṛta-kalpa-druma* of Rāma Tarka-vāgīśa which he has published in the 'Indian Antiquary' and elsewhere. The Central Asian documents, translations of the Buddhist canon into Prakrits other than Pali and into Buddhist Sanskrit (some of which discovered in fragments by the French Missions have been edited by my friend and colleague Dr. Niranjan Prasad Chakravarti and are now being printed in Paris) are affording us a clue as to the language of the Original Buddhist Canon, to the language of the Buddha himself. Dr. Heinrich Lueders' proposed reconstruction of the Ancient Magadhan speech will be full of suggestive value; and the Asoka inscriptions in the new edition of Hultzsch will remain an indispensable classic with the student of Indo-Aryan philology.

For practical purposes, the extant Second Middle Indo-Aryan (Prakrit) texts have been sufficiently well analysed in the grammar of Pischel. The Pali dictionaries of the Pali Text Society, and of Trenckner now in progress at Copenhagen afford other and larger masses of material of utmost importance. From the very nature of Pali as an *Umgangssprache* with a vocabulary which is partly a mosaic—although in its grammar it is based on an old Midland dialect, an early form of Śaurasenī; from the constant intermingling of forms from diverse dialects in the Prakrit inscrip-

tions; and from the artificial character of the later Prakrit dialects in the drama and in learned literature, it is exceedingly difficult to find out the lines of isogloss in Ancient India. The Asoka inscriptions fortunately supply us with some positive and nett information; but the first millennium after Christ, practically the entire Prakrit period, is a great disappointment. It seems that our knowledge of the distribution of the Middle Indo-Aryan dialects and of their characteristics will ultimately be solved from the study of the modern languages themselves; and in this way alone we shall be able to arrive at sure results.

For Middle Indo-Aryan, Buddhist Sanskrit is an important field of study. Not much attention has hitherto been paid to this in India. My pupil and colleague Mr. Sukumar Sen has published a promising study of the Syntax of Buddhist Sanskrit (in the Journal of the Department of Letters, Calcutta University, Vol. XVII), as part of a projected work on the Historical Syntax of Indo-Aryan.

Old Indo-Aryan, fortunately for Indian Linguistics, has received the best and most careful treatment in Europe, Old Indo-Aryan and the question of Indo-European being closely connected. I shall only mention in this field the work of H. Oertel on the Syntax of the Noun in the language of the Brāhmaṇas (in course of publication, Heidelberg, 1926), a subject in which Mr. Sukumar Sen of the University of Calcutta is also working (Journal of the Asiatic Society of Bengal, 1926, and Journal of the Bhandarkar Research Institute of Poona, 1927, 1928). An Etymological Dictionary of Sanskrit is being waited for eagerly. The promised second edition of Uhlenbeck is long in coming. Not only the Indo-European but also the non-Aryan element in Sanskrit should receive adequate treatment in it, with the materials that have so far accumulated.

Non-Aryan loan-words in Sanskrit (and in other Indo-Aryan) form a sort of liaison channel between Aryan Linguistics on the one hand and Dravidian and Austric Linguistics on the other. The work of Caldwell, Gundert, Kittel and K. Amrita Row (Indian Antiquary, 1917) have broken the ground for Dravidian. The researches of Jean Przyluski in the *Mémoires de la Société de Linguistique* of Paris and in the *Journal Asiatique*, and the very suggestive paper of Sylvain Lévi in the *Journal Asiatique* on Pre-Aryan and Pre-Dravidian in India (papers which along with an article by Jules Bloch on *Sanskrit and Dravidian* have been translated into English by my friend Dr. Prabodh Chandra Bagchi and will be published shortly from the Calcutta University Press), have opened up a new field of enquiry, namely, the influence of the ancient Indian dialects (of the type of the Kol speeches or the Mon-Khmer ones) belonging to the Austro-Asiatic branch of the Austric family upon Indo-Aryan. The question of Indo-Aryan borrowings from Austric presents a new horizon in the study of the origin and development of Indian Hindu Culture—viz., with reference to the Austric (Mon-Khmer or Kol) substratum in it. It is getting to be more and more convincing that the bases of our Hindu, i.e. post-Vedic culture are largely Dravidian and Austric—possibly mainly Austric in the Ganges Valley and the East, and Dravidian in the West and South—and that the Aryan elements were impositions from the top only. A great deal of our material culture, our customs and usages, as well as our religious notions and practices and our myths and legends, such as we find established in a characteristic Hindu world as opposed to the largely Indo-European *milieu* of the Rigveda, are in their origin non-Aryan—Austric, and Dravidian. The Aryan has imposed his language, and his organisation and his mentality to some extent; and his world of religious notions has had to make a compromise with the

world of the pre-Aryan gods. This line of research has come in with Linguistics,—with an enquiry into the origin of a group of words in Sanskrit which cannot be satisfactorily explained with the help of Aryan roots, and which have affinities among the non-Aryan languages of India, Indo-China and Indonesia rather than with the Indo-European speeches outside India. We cannot as yet definitely say where this line of research will lead us. But it is fraught with immense new possibilities, although its outlook and its insistence on the non-Aryan aspect of the question might shock our pro-Aryan susceptibilities.

For this line of research to be firmly based, Dravidian and Comparative Kol and Mon-Khmer Studies will have to make a real progress. The apparently early break-up of a Primitive Dravidian and the very late date of the oldest Dravidian documents make the problem one of extreme difficulty. Some isolated papers on Dravidian Linguistics which can be mentioned after Caldwell's Comparative Grammar and Graul and Vinson's Tamil Grammars, as well as Gundert's Malayalam Grammar and Kittel's Kannada Grammar, are more speculative than anything else. Jules Bloch's suggestion that the Primitive Dravidian speech might really have been a language with consonant groups initially, with words of the type of *Dramila* as in Old Indo-Aryan, and not a language with an attenuated phonetic system as in Old Tamil, goes to the root of the question, and makes some recent attempts at finding out the phonetic development of Dravidian nugatory. Moreover, the existing Modern Dravidian speeches have not been described and analysed in detail. Among recent endeavours, a very important one is the *Tamil Lexicon* now in progress from Madras University. A good grammar of a Dravidian speech has come out this year, that of Kui by the Rev. W. W. Winfield, from the Asiatic Society of Bengal. What we want is a series of rigorously scientific

grammars of all the important Dravidian languages, complete in their phonetic analysis of the speech and in their inclusion of the Phonology, Morphology and Syntax of the colloquial dialects, with all interesting details. A series of historical and comparative grammars of Tamil, Telugu and Kannada, without theorising, but only juxtaposing the oldest and the subsequent forms as found in the actual old records of the language and as actually spoken, with analogous forms from the other Dravidian speeches, would be ideal. There is no lack of good models in European languages to guide us, e.g. the historical and comparative grammars of Joseph Wright as published by the Oxford University Press, to mention works on a small scale only; the old literatures are there, with large portions of them already in print; and the necessary thing to do will be only to obtain the materials illustrating the modern spoken language, and to correlate the whole. Will not competent Dravidian-speaking scholars be coming forward, and by demonstrating their love for their mother-tongue in this way, win also the gratitude of students of Linguistics outside?

For the Kol speeches, the Rev. P. O. Boddling of the Scandinavian Mission to the Santals, over thirty years a resident among the Santal people, has been doing work of paramount importance. His *Materials for a Santali Grammar* (Part I, Dumka, 1922) gives the most detailed description of the phonetics and phonology of Santali; and recently under the auspices of the Norwegian Institute for Comparative Research in Human Culture at Oslo, he has been publishing a large mass of Santal folklore (the Santali text with English translation opposite) the value of which is inestimable. For this enterprise Mr. Boddling and the scientific world of Oslo responsible for it deserve the most grateful thanks of all Indologists as well as linguistic students and ethnologists. The cyclopaedia of Mundari life inaugurated by Father Hoffmann

when published will be another valuable mass of materials on an important Kol people and its culture.

In Mon-Khmer linguistics, the admirable editing of the old Mon inscriptions of Burma by Prof. Duroiselle and Dr. C. E. Blagden is laying by a good stock of materials. Thanks to the labours of the French Scholars, the oldest monuments of Mon-Khmer, in the Khmer and Mon inscriptions of Cambodia and Siam, are available for linguistic use. More grammars like G. Maspero's Khmer Grammar (1915) and Mrs. Leslie Milne's Palaung Grammar (1921) are wanted; and we are waiting for the further working out of this branch of Austro studies, especially in relation to Kol, by some one among the few scholars working in this field, like Pater Schmidt, Blagden, Przyluski and Maspero.

The Tibeto-Chinese speeches have not received any serious attention from the linguistic point of view. It should be our endeavour when the opportunity is favourable to take up this study. Here of course one must make a final choice, if one is to do work of any value. But if Tibetan, although of a mechanical kind, and no real language, has been quite easily combined with Sanskrit for the study of Buddhist texts (beginning with Sarat Chandra Das in India), the study of Tibeto-Chinese dialects like Newari and Bodo, even if for estimating their influence on Modern Indo-Aryan, e.g. Khaskura, Bengali, Assamese, should not be outside the scope of practicability. Some of the problems of Tibeto-Chinese linguistics have a fascination hardly inferior to that of Indo-European—e.g., the reconstruction of the pronunciation of Old Chinese, and the working out of the comparative phonology of Tibetan, Burmese, Tai, and Chinese.

In the above attempt to place before you the actual situation in linguistic studies and investigation in India, I fear I have been

rather long : but considering the scope and extent of the subject, I have been hoping that you would feel indulgent. I must close now : and this I do with a sincere expression of my grateful appreciation of the honour of being asked to act as President of the Philology Section of this Conference, which enabled me to have the privilege of meeting you and afforded me the opportunity of presenting before you some of my thoughts and views on the present position of the Science of Linguistics in our country.

Nasalization in Hindi Literary Works

By

SIDDHESWAR VARMA, M.A., D.LIT.

Abbreviations.

Abhi.	Abhidhāna Rājendra.
Agra.	Kuṇḍalis of Agradāsa (Viṣṇu Bāvanī), MS. S. 2366 d. India Office.
Apā.	Aphabhrapāsa.
Ara.	Arabic.
Bait.	Baitāla Paccīsī, MS. IO. S. 2342 (A.D. 1812).
Bhak.	Bhakta-mālā, MS. IO. S. 2090.
Bhavi.	Bhavisayatta-kahā, Gaekwād's Oriental Series, 1923.
Bih.	Bihārī Satsaī, edited by Grierson, 1896.
Bīr.	Bīra Sīngha Caritra, MS. IO. S. 3015.
Bloch	La formation de la langue marathe, by Jules Bloch, 1920.
B.M.	British Museum.
Cat.	Caturmāsa-brata-mahimā, MS. IO. S. 2468 d.
Chattī.	Chattīsgarhī.
Chattī. G.	A Grammar of the Chattīsgarhī Dialect, Translated by Grierson, 1921.
Chattr.	Chattrā-prakāśa of Lāl Kavi, MS. IO. 2672 A.S.
Dād.	Dādū kī bāṇī, MS. IO. S. 3255.
Han.	Hanuman-nāṭak, MS. B.M. Or. 2751 (A.D. 1823).
Hi.	Hindī.
Hit.	Hitopadeśa, MS. IO. S. 2385.
IO.	India Office.
Jodh.	Itihāsa Jodhpur, MS. B.M. Or. 7622.
Kab.	Kabīr Samgraha, Lucknow. Sambat 1955.
KP.	Kavipriyā, MS. B.M. 5587.
Kellogg	A Grammar of the Hindi Language, 2nd Edition.
KZ.	Kuhn's Zeitschrift für die vergleichende Sprachforschung.
Lah.	Lahndī.
L.S.I.	Linguistic Survey of India, ed. Grierson.
Man.	Mana-vikṛta-karaṇa-guṭkā-sāra, MS. IO. S. 865b.
Mar.	Marāṭhī.
Me.	Mewār Vamśāvalī, MS. B.M. Add. 26'545 (A.D. 1816).
Mud.	Mudrā-rākṣasa by Bhāratendu Hariścandra, 1887.
Pad.	The Padumāvati of Malik Muhammad Jaisī, edited by Grierson, 1896.
Pāk.	Pāka-vilāsa (a treatise on cookery), MS. IO. S. 1466 (A.D. 1757).
Panj.	Panjābī.
Pischel	Grammatik der Prakrit-sprachen, 1900,
Pkt.	Prakrit.

Prem.	The Prem Sāgar of Śrī Lallu Lāl Kabi, edited by Eastwick, Hertford, 1851.
Prth.	Prthvī Rāja Rāṣau, published by the Nāgarī Pracāriṇī Sabhā.
Rām.	Rāma-vinod (a work on medicine), MS. IO. S. 1934.
Sām.	Sāmudrika, MS. IO. S. 2345a.
Satya	Satya-hariścandra, by Bhāratendu Hariścandra, 1887.
Si.	Sindhī.
Sūr.	Sūra-sāgara, Lucknow, 1886.
Skt.	Sanskrit.
Tul.	Tulsi Rāmāyaṇa, MS. IO. S. 2510. The printed edition generally used for comparison is Bombay, 1899, unless otherwise pointed out.
Vall.	An account of the manifestation of Kṛṣṇa on the immediate descendant of Vallabhācārya, MS. B.M. 26543 (Quoted as 17), 26544 (18).

That Indo-Aryan to a greater or lesser degree has a tendency to nasalization is a fact noticed by phoneticians from Śākalya¹ to Daniel Jones.² But the subject presents so many complications that a systematic survey of nasalization in individual Indian languages is necessary before any definite conclusions regarding the subject could be established. It is desirable in this connection to start with a language spoken by the largest number of inhabitants in India, *viz.*, Hindī (in the wider sense, including Western Hindī, Eastern Hindī, and Rājasthānī).

It is important to note, as Bloch has rightly pointed out,³ that the facts of nasalization only rarely come to the notice of the speaker, and that these facts are even more rarely transcribed. Whenever, therefore, literary works, especially manuscripts, copiously transcribe nasal sounds, it may be presumed that the tendency to nasalization in the language transcribed was particularly strong in some period. Fortunately Hindī literary works, especially the so-called

¹ Vide Rgveda-Prātisākhya, I. 26; Pāṇini, VIII. 4. 57.

² He tells me in a private communication that Indians seem to have a tendency to nasalize final vowels. Cf. also Bloch, "La Nasalité en Indo-Aryen," in the Cinqante-naire de l'École Pratique des Hautes Études, 1921, p. 63; Turner, JRAS. 1921, p. 344; and Grierson, JRAS. 1922, pp. 381 ff.

³ La Nasalité, etc., p. 65.

“inaccurate” manuscripts,¹ offer us considerable material to throw further light on the subject.

Nasalization may be considered under two main heads:—

I. Dependent Nasalization.

II. Independent Nasalization.

I. By dependent nasalization is meant the nasalization of a vowel due to an adjacent nasal consonant either actually present or lost owing to historical reasons.

II. By independent nasalization—the so-called “spontaneous”² nasalization—is meant the nasalization of a vowel without the proximity of a nasal consonant actually present or lost owing to historical reasons.

I. Dependent nasalization may be medial or final.

(1) Medial dependent nasalization in Hi. is generally regressive, though sometimes progressive. Thus many manuscripts write *rāma* “Rāma,” but *māra* “kill.” The following examples of regressive medial dependent nasalization may be of interest:—

Tulsi Rāmāyaṇa: *kṣṇ* “ear” (Fol. 306a), *jṣṃvant* “name of a monkey” (Fol. 306b), *hanumāṇā* “Hanumāna” (oblique) (Fol. 307a), *ati-balaṇā* (Fol. 307a).

Hanuman-nāṭak: *chatriya-srōṇita ke kara kuṇḍa* (Fol. 2a) “having made fountains of the blood of Kṣattriyas” (Fol. 2a): here *srōṇita* “blood” <Skr. *śonita*—

Mana-vikṛta-karaṇa-guṭkā-sāra: This MS. writes *tūm* “you” throughout for the *tum* of “accurate” editions.

¹ It is a pity that editors of literary works in India should select and compare only those manuscripts which are very nearly the standard of academic accuracy. This “segregation” obscures the living facts of the language, and such editions have therefore little value for the intricate problems of linguistics.

² “Spontaneous nasalization” may suggest that the phenomenon occurs unconditionally: the conditions of nasalization may be obscure at present, but further research may bring them to light. “Independent,” suggested by the Cārāyaṇīya Śikṣā, seems to be a better term. This Śikṣā calls Anusvāra as a “dependent” (*parāśraya*) sound, being due to an original nasal consonant *anusvāro visargaś ca kalapāthaḥ plutāḥ yamaḥ, jīhāmūlam upadhmā ca ṣoḍasaite parāśrayāḥ* (Cār. Śikṣā, MS. Göttingen, 25, Chap. II).

Dādū ki bāṇī : *mātā, rāma-rasa* (Fol. 80a), “O mother ! the devotion to Rāma...” Here we have an example of regressive nasalization in *rāma*, but the absence of (progressive) nasalization in the *mā-* of *mātā*.

The more or less consistent nasalization of vowels, especially long *ā*, before nasal consonants in the above works is an indication of an unusually strong nasality. For it is true that an element of regressive nasalization exists in many languages, *e.g.*, nasalization is generally not heard in the English word *nap*, but it is often, though slightly, heard in the word *pan*. But considering the fact, pointed out above (p. 2), that transcription of nasality is not likely to occur unless it is particularly strong, it is probable that the nasality of the vowels in words like *kāṇ*, etc., in the above-mentioned works was stronger than in the case of English words like *pan*, etc.

It is also a significant fact that the above-mentioned manuscripts nasalize the vowel *a* much more frequently than the other vowels and this seems to confirm the observation of Bloch that “*a* est de toutes les voyelles le plus aisément nasalisable.”¹ This fact was observed even by as ancient an authority as the Taittiriya Prātiśākhya. This work first mentions the opinion of Śāṅkhāyana and Kāṇḍāyana that the final *pluta* vowel of every word in the Pada Pāṭha is nasalized. It does not approve of the opinion, but adds that the (*pluta*) vowel *a* is nasalized even in the Saṃhitā Pāṭha,² as in *śūślokā sumāṅgalā*.

A particular case of medial dependent regressive nasalization occurs when an original nasal consonant is (a) intervocalic, or (b) the first member of an intervocalic consonant-group.

(a) When the original Skt. *m* is intervocalic, it becomes *v* and nasalizes the preceding vowel. The nasality in this

¹ Le nasalité, etc., p. 63.

² XV. 8 (Mysore, 1907); *akāras tu saṃhitāyām api*.

case seems to have been comparatively weak, as several works write the Anunāsika for it, though not consistently. Thus in the Prthvī Rāja Rāsau we have *yaṁ somesa kuār* "young like Kṛṣṇa" (I, p. 282); *cāvaṇḍa* or *cāvaṇḍa* "name of a God" (I, p. 286).

In the Padumāvati of Malik Muhammad Jaisī we have *sīra nāṣhī* (p. 26) "they bow their heads" *rova* < *roma*- (p. 3) "hair on the body," but *v* and the Anunāsika often do not occur in many words, as in *bhūim* (p. 19) "the earth" < *bhūmi*-; cf. Si. Lah. *bhū*; *jaumṇ* (p. 20) "Yamunā."

It might have been only a mode of writing by different scribes, but considering the fact that Lah. has *kvārā* < *kumāraka*- but *bhū*,¹ it is possible that the transcription of the Anunāsika in some words only was based on an actual weakness of nasality in some dialects.

An interesting treatment of an original intervocalic *m* occurs in Pad. (p. 52), where we have *nū* "lemon" for Arabic *laimūn* in the sentence—*nauraṅga nū suraṅga jambhīrī* (p. 52) "There are oranges, lemons, suraṅg (?) and jambhīrī (?) fruits." This seems to indicate that this tendency was alive in the 16th century, though it had been established considerably earlier (cf. Pischel, pp. 174, 175).

For the original intervocalic *m* in *amṛta*—Jain Pkt. *amaya*- (Abhidhāna Rājendra), Old Pkt. *amada*- (Pischel, p. 136)—we have in Pad. the semi-tatsama form *ā(m)brita* (pp. 48, 52): cf. Panj. Lah. pronunciation of "Amritsar" as *āmbbarsar*. The short *a* seems to have favoured the closing of the syllable with *b*.

(b) As regards the intervocalic group *m+r* we have in Pad. *āmbahi* (p. 29) "in the mango," *āmb-rāū* (p. 40) "the king of mangoes (or the royal mango)," where *b* inserted in the Prakrit form (Pischel, p. 202) is preserved. These are evidently semi-tatsama words. But *m+b* sometimes gives

¹ This difference may be due to mixture of dialects.

nasal vowel + *v* and often *mm* or *m*. Thus the Baitāla Paccīsī sometimes writes *digamvara*¹ (Fol. 12*b*, 14*a*) and sometimes *digāmara* (Fol. 11*a*, 12*a*, 14*b*): cf. Pad. *kadama* < *kadamba*- (p. 52).

Another interesting tendency to substitute a nasal consonant for an original plosive appears in some of the Hindī dialects. Thus Chatti.² has *bāmmār* < *babūl* "name of a tree": cf. Braj.³ *romatī* < *rovatī* "weeping" (feminine), *bāman* < *bāvan* "fifty-two." The nasal consonant in these examples seems to be a recent development from nasalized vowel + a lax *v* — the nasalization having occurred in hiatus, as we shall see (cf. pp. 17, 18).

The group *n + m* (Pkt. *mm*) has a curious treatment in Pad. *saūha* < Pkt. *sammuha* < Skt. *sanmukha*- (p. 22). This seems to be a further nasalization of *m* < *mm*. It seems to be confirmed by *sōhī* "in front of," occurring in the Prem Sāgar: *jis ke sōhī koī dīna ko satāvegā* (p. 2) "in whose presence, if anybody will oppress the poor....."

Progressive medial dependent nasalization also occurs occasionally, but not very generally in Hindī works. Thus Rām-vinod (a treatise on medicine): *golī jetī nīglē tetā varkha nārūa na hoī* (Fol. 70*a*) "for as many years as the pill is swallowed, the tape-worm does not occur." Here we have progressive nasalization in *nīglē*.

Again cf. Tul. *asa mana samūjhi kahata jānakī* (Fol. 309*b*) "having understood this in her mind, says Jānakī." The *u* of *mu* is nasalized progressively. In both these examples the *ī* and the *u* seem to have been nasalized to facilitate syllabic division in rhythm. Thus the *jh* of *samūjhi* is intervocalic and, phonetically, it is divided between the two vowels *u* and *i*, but the nasalization of *u* completes the syllable *mu* before the on-glide of *jh* starts.

¹ Abhi. gives *digamvara* or *digambara*.

² Chatti. G., p. 17.

³ L. S. I., Vol. IX, Pt. 1, p. 76.

In this connection Bloch¹ seems to suggest that this nasality does not occur before *voiceless* consonants, and illustrates *māthā* "forehead" but *naṅgā* "naked." But our "inaccurate" records do not confirm this view. Thus in the Hitopadeśa we have *māṣā* "rat" in *hiraṇyaka māṣā bole* (Fol. 14b, 13b), "the rat Hiraṇyaka said." Even *māthā* has nasality in Pad.—*rūpavanta mani māṭhai* (p. 22), "he is so handsome that a jewel (seems to shine) on his forehead." Again in Bīra Sīṅha Caritra we read *nara-nātha* "the lord of men," but *nīla-kaṇṭha* (Fol. 39b) "a proper name."

Similarly Man. *updāśa-mātra* "only instruction" (Fol. 2b), and Tul. *kaha rāvana sunu sumākhī sayānī* (Fol. 309b), "says Rāvaṇa, 'hear, O fair-faced, wise one.'"

As we shall see presently, many cases of this nasalization occur in tatsama words of uncommon usage, especially foreign words (see pages 9, 10).

This progressive nasalization occurs syntactically also, passing on to another word in the same sentence: thus Prem. often writes *ī* "only," but after a nasal consonant there occur many cases of *ī̃*, as in *tū ne ī̃ to lagāyā hai* (p. 21) "it is only you who have put it."

II. Independent nasalization.

This may be considered under two heads—(1) medial, and (2) final.

(1) Medial independent nasalization may be further considered under two sub-divisions :—

A. Before a consonant.

B. Before a vowel, *i. e.*, in hiatus.

A. As regards medial independent nasalization before a consonant, Grierson² maintains that "the spontaneous nasalization referred to above occurs only in the words falling under class I (*i. e.*, before double consonants)." Facts, however, do not confirm this view. Our MSS. and the living

¹ Le Nasalité, etc., p. 72. ".....exclusivement en presence de sonores" (p. 71).

² JRAS. 1922, 383.

dialects indicate many examples about which there could be no question of the necessity of a succeeding double consonant, as we shall see presently.

The following examples will illustrate nasalization under this head :—

gūra “religious guide.” This word, with a nasalized *u*, occurs dozens of times in the philosophical work *Manavikṛta-karaṇa-guṭkā-sāra* (M S I O S. 865a), as in *tā te hasti gūra hiye me dhārīyā* (Fol. 13b) “then he (Dattātreyā) held in his heart the elephant as his religious guide;” *pandravē gūra kīyo mṛgakū* (Fol. 13b) “he took the deer as his fifteenth *guru*.” There could be no question of the doubling of *r* in this case, for, as has been noticed by the Śikṣās,¹ there are no indications of *r* have been doubled in Indo-Aryan, for we do not find compensatory lengthening of the preceding vowels in modern Indian words like *gurū*, *harī*, etc.

caūrāsī “eighty-four”: Kab. *caūrāsī bharmē nahī* (p. 28), “he will not wander through 84 crores of birth.”

sāsa “breath,” a common word in Hi.; Panj. Lah. *sā* “breath” does not indicate any trace of a nasal consonant or the doubling of the succeeding consonant.

kāga “crow”: Hit. *sāklī kāga le gio* (Fol. 78b). “The crow took away the chain.” The nasality here may be onomatopoeic, but as the original Pkt. consonant after it is preserved, it is probably a case of independent nasalization.

tēla “oil”: Rām. “*tēla-mārdan vāyu nā rahē* (Fol. 2a) “wind is removed, if oil is rubbed.”

dēvatā “a deity”: Chattī. G., p. 17.

cārvāka < *cārvāka*: Han. *aīse kauna cārvāka māre sūra ek āka* (Fol. 12b). “Who is here a Cārvāka who can destroy these heroes in the twinkling (of an eye)?”

dūrvacanai “bad words”: Man. *kaun kahau dūrvacanai* (Fol. 4a) “Some may speak bad words.”

¹ Gautamī Śikṣā; *sarvatra svarāt samyogādīḥ krāmati repha-hakāra-varjam*; Śikṣā-saṃgraha, p. 451; Lomaśī Śikṣā, *Ibid*, p. 457.

kaūsala "Kosala"—Tul. *hrdaya rākhī kaūsala-pura-rājā* (Fol. 308a) "having remembered the king of Kosala." The printed edition has *kośala* (p. 681), but cf. Chattī. *kaūsillā*, *kaṛkeī*, Chattī. G., p. 193.

kāśī "Kāśī": Han. writes *kāśī* throughout as in *kake kava kāśī-rāma* (Fol. 14b, 15a, etc.) "says the poet Kāśi Rāma."

sarōvara "lake": Agra. *trikhāvanta dvai jīva sarōvara paī calī jāvē* (Fol. 3b) "two thirsty creatures go to a lake."

cāpa "bow": Han. *bhaī cāpa-dhunī* (Fol. 10b) "there arose a note from the bow": *chīn laiḥū tūna cāpa* (Fol. 14b) "I can seize his quiver and bow."

upāśaka "worshipper": Bhak. *haryopāśaka hoyā* (Fol. 5a) "being a worshipper of Hari."

upavāsa "a fast": Bait. *nahī upavāsa hajār* (Fol. 42a).

itihāsa "history": Bhak. *purāṇa itihāsa* (Fol. 2a), *itihāsa kiyo* (Fol. 37b) "he prepared the history."

svārūpa "nature": Collection of Hindi Upaniṣads (MS. IO. S. 982). (1791 A.D.) *voh jo māna svārūpa sō ajñātā ho* (Fol. 1a) "he who does not know the nature of egotism."

Many more examples could be quoted, but enough has been shown to indicate that medial independent nasalization may occur in Hi. even if the succeeding consonant was not doubled in the original language. But the phenomenon occurs, not only in Hi., but in other allied languages as well, as the following examples will show :—

Lah. *Bāś ki nāga* "the Vāsuki snake," *dhāta* "semen" < *dhātu-*, *kāśī* "Kāśī," *Bāśī* "name of a man" < *vāśī*, *śāuk* "taste" Ara. *shauq*.

Si. *kaṛsarī* "a lion," *sahājo* "simple," *śāuku* "foppishness" < Ara. *shauq*, *rāḥaut* "tranquillity" < Ara. *rāhat*, *kirāhat* "disgust" < Ara. *kirahat*, *taūkal* "resignation to God" < Ara. *tawakkul*.

Guj. *vēt* "the span" < *vitasti*, *hāsil* or *hāsīl* "produce, tax" < Ara. *ḥāsil*, *ṭāp* "a stop" (in punctuation) < English "stop," *ṭāhtālīs* "forty-three," *bhūsū* "straw" < *busa*.

Mar.¹ *kēsar* "lion" < *kesar*, *phāṣ* "snare" < *pāṣa*-, *khēvā* "rowing" < *kṣepanika*-, *ciṃvar* "filaments round the pulp of the bread-fruit tree" < *cikurā* "hair," *ḍvalne* "to wave an offering round the head of an idol" < *ava val* (Lah. *uvālan*), *kaṃvaṇṭal* "malicious magic" < Pkt. *kavattia* < *kadarthita*-, *paṃvādā*² < *pravāda*-.

It is difficult to hazard an explanation of the above phenomenon, but the following points may be conceivable. We find that many of the above-mentioned words are either tatsama loan-words or uncommon words. Now when a man was called *Kāśīdās*, how was it that the *ā* of *Kāśī*, but not of *dās*, was transcribed with a nasal symbol? Two possibilities are conceivable: (a) The *ā* of *dās* was also slightly nasalized, but as *dās* was a very common word, it was not regarded necessary to transcribe the nasality of its *ā*. The *ā* of *Kāśī*, however, as it was an uncommon word, was pronounced with a more complete nasality which was transcribed. (b) Nasality, the tendency to which was already present in the language (*cf.* pp. 2, 3), was an involuntary device to cover the defects of pronouncing an unfamiliar word, and in the case of familiar words was a means of rendering more open the penult or antipenult of polysyllabic words, and a concomitant of possibly increased vocalic length of monosyllabic words.

(2) Final dependent nasalization.

Nasalization under this head may be considered under the following sub-divisions:—

A. Nasalization of a final vowel due to the actual presence of a preceding nasal consonant. That the final vowel in this case has a high degree of nasality in many Indian languages is a matter of common observation. Thus the vowels in *nē* (agent-post-position), *mē* "in" are commonly pronounced with a strong nasality, and many MSS.

¹ From Bloch, index.

² Bloch, p. 84.

consistently transcribe it after the nasal consonant, of which hundreds of examples could be quoted like the following :—

“Vallabhācārya” (an account of the manifestation of Kṛṣṇa on the immediate descendant of Vallabhācārya) 18, *pīche rājā nē dharma sō pūche* (Fol. 22a), “after this the king asked Dharma.”

Prem.: *janmē haī* (p. 20), “they are born”; *kisī samāī* (p. 20), “once upon a time”; Chattraprakāśa: *apnaī* (Fol. 2b, 1a), “one’s own”; *ham naī* (Fol. 5a), “by us,” “we,” *apnaū* (5b), “ours.” The MS. transcribes the nasal sign on the open vowels *e*, *ai* and *ā* more frequently than on the close vowels *i* and *u*. This further seems to confirm the above view regarding the particular “nasalability” of *ā*.

B. Nasalization of a final vowel due to an originally present (but now absent) nasal consonant. This may be considered under four grammatical heads, viz., declension, conjugation, adverbs and particles.

(a) A simple case of nasalization occurs in compound words as in Han. *mahāśrudra* (Fol. 15b), *mahāśukha* (Fol. 21b). This seems to be a case of progressive nasalization due to the preceding *m*.

For the word “hundred” we have *saī* Prth. I, p. 17, and *śē* in another passage of the same work (Journal of the Asiatic Society of Bengal, 1886, p. 7): cf. Guj. *śē*. Here we have presumably the preservation of the old *śatam* inherited in a nasalized form through Pkt.

It is difficult to say whether there occurs a similar preservation in *lahū* “blood” (Satya-hariścandra, p. 35), or in *bhaū* “fear” in Kavipriyā (Fol. 29a), *bhavana-bhaū hare* “he removes the fear of the earth.” These words may have been formed on the analogy of words like Pkt. *dahī* (cf. Pischel, p. 134), being survivals of the neuter gender in Hindī.

So much for nominative singular. In nominative plural, some works occasionally show the final Anusvāra as in the following examples :—

KP. *nūpura kī dhuni suna bhaurē kula...caūk caūk parē* (Fol. 31a), "having heard the sound of the anklets, swarms of bees are stirred," where *bhaurē* is nasalized at the end. Similarly Tul. has *rakhavārē* "guards" in *rahe tahē bahu bhaṭa rakhavārē, kachu mārēsa kachu jāe pukāre* (Fol. 312b) "there stood many soldiers as guards there; he killed some of them, while some of them went and complained to Rāvaṇa."

Again, *torē* "thy," *morē* "my" in Tul.: *sunu laṅkesa sakala gun torē, tāte tumha atisaya priya morē* (Fol. 322a) "O Lord of Lankā (Bibhīṣaṇa) (owing to) all your virtues, you are very dear to me."

Cf. again Tul.: *tum sārīke santa priya morē* (Fol. 322a) "good people like you are dear to me."

It is difficult to determine whether the nasality in the above examples is analogical or independent. Perhaps they suggest some affinity to masculine nom.-acc. plurals in-āni.¹ And if nasal endings of past participles, of which copious examples occur, could be also brought under this head, traces of -āni forms in old Hindi would be probable, e. g. :—

āyē "came": Tul., *kautuka-hī āyē puravāsī* (Fol. 314b), "the citizens came to (see) the scene"; *lāgē* "began": Tul., *śravana nāsikā kātana lāgē* (Fol. 324a) "they began to cut his nose and ears"; *beṭhē* "sat": Tul., *beṭhē rāma dvijana sira nāṣ, janaka-sutā sameta doūbhāī* (Fol. 410a) "both Rāma and his brother, with the daughter of Janaka (Sītā), bowed their heads to the Brahmanas and sat down"; Vall. 17, *padharē* "went": *tab Śrī Vallabhācārya-jī parbat ūpara padhārē* (Fol. 4a) "then Vallabhācārya went up (plural of respect) the mountain."

Jodh. gives a nasal ending to denote the agent noun, as in *akbarē, vikaṣ* in the following passage :—

1515 *mā vīkānera rāo vikaṣ jaṅgal māḥḥ vīkānera vasāyo,*
1612 *mā āgrā śrī pātsyāhī akbarē akbarābād* (Fol. 14a), "in

¹ F. W. Thomas, JRAS., 1922, 82; 1923, 449.

1515 Raja Vikā established Bikaner in the desert, in 1612 His Majesty Akbar... Akbarābād (near) Agra." Here the nasality in the agent-nouns *akbarē* and *vikaṛ* seems to be parallel to the -n- in the ancient termination of the instrumental singular.

As regards the oblique singular, Tul. often gives nasal ending as in *jēhi* "whom" :—

rām krpā kari citvaṛ jēhi (Fol. 308a) "he on whom Rāma looks with favour," though the printed edition gives *jāhi* (p. 681). Kellogg (p. 138), mentions similar examples in Braj. as in *mīthē vacan so* "with a pleasant word." The nasality here may be traced back to the instrumental singular; at any rate it cannot be definitely asserted that it is a case of independent nasalization.

(b) In conjugation, several MSS. give a nasal ending, even when the subject of the verb or the sense of the verbal form is singular, *e. g.*, in Tul. : *tahē jāi dekhē bana sobhā* (Fol. 307a) "there (*he*, Hanumān) saw (*dekhē*) the beauty of the forest." It may be presumed that this nasalization is due to the "plural of respect," and as Grierson has pointed out (KZ., 38, p. 473), "the use of the plural for the singular is common in the later vernaculars." But the nasal ending of a singular verb occasionally occurs in Apa., as in *anuattaṛ < anuvarttate* (Bhavi., p. 106), and the vernacular tendency in the example before us may be the preservation of an older *phonetic* (as opposed to syntactical) phenomenon. Again, Tul. *mana mē tarka karē kapi lāgā* (Fol. 308a) "the monkey (Hanumān) began to conjecture in his mind." The printed edition gives *karan* instead of *karē*.

Nasality under this head also occurs at the end of optative verbs, as in Bait. *vicār kariyē* (Fol. 10a) "you should think;" Hit., *ḍariyē nahē* (Fol. 65b) "you should not be afraid."

Examples like these are rarely met with in printed works. Perhaps here we have cases of independent nasalization, though grammatical analogy from third person plural is not unthinkable.

Even the present participle singular has sometimes a nasal ending, as in Tul. *baithē hi viti gār nīsi jāṃā* (Fol. 309a), "a quarter of the night was passed (by him) sitting (*baithē*)"; the printed edition, as usual, has *baithē* (p. 683), instead of *baithē*. The nasal here may be an archaic dialectical form in which the shift to accent and the consequent loss of the nasal had not yet occurred, though it may possibly be a case of independent nasalization.

(c) Nasal endings of adverbs, already noticed in Pkt. as in *bahim*, *mukum* (Pischel, p. 133), often occur in Hindī works with the vowels *o*, *au*, *e*, *ai*, *i*, *u*, *ū*, as in the following examples:—

Prem. *jō itnī bāt kahī, tō-* (p. 14) "when (*jō*) he said this, then..." cf. Mar. *jō* "at the moment when"; corresponding to Skr. *yataḥ*. (Bloch, p. 210).

Vall. 18: *āgē rājā ambarīkha satya-juga mē bhaye haī* (Fol. 7a) "formerly (*āgē*) there was a king Ambarīkha in *Satya Yuga*." This work throughout uses *āgē*, *pīchē* for "before" and "behind," respectively. If *āgē*, *pīchē* are based on an oblique termination, their nasal ending has perhaps independent nasality. But the analogy of Pkt. *bahim*, etc., may have influenced even here.

Mewār Vamśāvalī uses *pachāī* "after" (Fol. 1a, b etc.) many dozens of times. Similarly *nīcāī nīcāī* "down and down." Adverbs in *hī* are of common occurrence as in Bih. *kata āvata ihī geha* (p. 19) "why does he come in this (*ihī*) house?" These adverbs evidently go back to Pkt.: cf. *kahī* < *kasmin* (Woolner, Introduction to Prakrit, p. 81). *hū* endings of adverbs are common in Braj., as in Han. *ajahū* (Fol. 2b) "up to this time," Pad. *katahū* (p. 59) "somewhere;" Kabīr Saṃgraha uses *kabahū* (p. 13) for "whenever" very frequently. The *ū* here seems to have an affinity to *ō* or *aū* discussed above.

(d) As regards particles (including post-positions), it is a well known fact that nasal-ending particles commonly occur both in Braj. and Old Pūrbi, e.g., *kāhā, kē, kū, kē* "to,"

sō, sū "with" (Kellogg, p. 115). That the nasality in such words was not merely phonetic, but had some grammatical or semantic basis as well, may be illustrated by the following examples :—

Vall. throughout differentiates between *ke* "of," but *kē* in the sense of the conjunctive particle, e.g., the antithesis occurs in the following sentence : *so jesē devatā-brahmādika ke palāṭe brāhmaṇan kō beṭhāya kē pūjatai (tai ?) sē dharma ke palāṭe gau vrkhabha ko pūjana kara* (Fol. 18b) "hence just as we, having seated the Brahmans, worship them in place of the Gods like Brahmā, etc., so you should worship the cow and the ox instead of Dharma." Here we have *dharma ke* "of Dharma" but *beṭhāya kē* "having seated." Similarly the MS. writes *Yamunā jī ke snāna* (Fol. 2b), but *bhikṣā-vartan kari kē* (Fol. 9a), "having asked for alms."

Again, the treatise distinguishes between *so* "therefore," but *sō* "with," as in the following : *so tum rājā ho so tum dekho* (Fol. 21a) "so (so) you see, as you are a king" but *gau kū kali ne lāta sō mūri* (Fol. 19b) "Kali struck the cow with (so) his leg (i.e., kicked her)." Cf. Bhavi. *saū* or *siū* (pp. 165, 170) <*samam*. Many MSS. however, do not indicate this difference. They write, for instance, *kē* for "of" as Cat. *amāvāsa kē din* (Fol. 2a) "on the day of Amāvas." That both *ke* and *kē* may be traced back to Apa. *ka(y)ai*, *ka(y)ahī* has been pointed out by Grierson (KZ., 38, pp. 474, 476). This differentiation may suggest that the conjunctive particle *kē* goes back to an instrumental singular.

Chatr., however, distinguishes, not between *ke* and *kē*, but between *ke* and *kaī*. It uses both in the same sense, but when *k* is followed by *ai*, the *ai* is written with the nasal symbol. Thus in the same folio there occurs *phauj ke ūpar* "on the army" but, *kuvar kaī sāth* (Fol. 9b) "with the prince," *tā rājā ke Arjuna-pāla beṭā bhae, aur vā rājā kaī Sahana-pāla bhae* (Fol. 6a) "that king had a son named

Arjuna-pāla, and that king (Arjuna-pāla) (had a son named) Sahana-pāla"; *campat rāe ke ūpara āe* (Fol. 8b) "they came upon Campat Rāe," but *rājā Campat Rāe kaĩ p̣ṛca putra bhae* (Fol. 8b) "King Campat Rāi had five sons"; *malla-khān tin ke putra sūra-bīra bhae, aur malla-khān kaĩ rudra-pratāpa putra bhae* (Fol. 6b) "he had a brave son named Malla Khān, and Malla Khān had a son named Rudra Pratāpa." The nasal form *kaĩ*, as in the last examples, as well as *ke* may be connected with the nominative case. The following examples of *kē* with the nom. may be mentioned: Tul. *so ananya jā kē asi* (Fol. 994a) "he is a perfectly loyal servant, in whose hands (*lit.* of whom) there is a sword"; Tul. *saciva sabhita bibhikkhan jākē, vijaya-vibhūti kahē lagi tākē* (Fol. 324b) "he whose minister is the timid Bibhiṣaṇa—how can victory and prosperity come to him?"

If, however, the *kē* and *kaĩ* in these examples are really connected with the oblique, and not with the nominative case, as in *us kaĩ putra bhae*, the *kaĩ* governing the oblique case *us*, then it is probable that the nasality here is dependent. But Chatra.'s *phonetic* (as opposed to *grammatical*) differentiation of *ke* and *kaĩ* seems to indicate independent nasalization in the latter. Does it suggest that both the final vowels *e* and *ai* were nasalized, but *ai*, being more open and a longer vowel, was subject to stronger nasality, and hence transcribed with the nasal symbol?

ke and *kē*, then, seem to have a different treatment in different dialects, some indicating only a phonetic, others grammatical difference.

Conclusion.—The above study of dependent nasalization gives us the following points :—

(1) There has been a strong tendency among Hindī speakers to open the nasal cavity during the articulation of a vowel when a nasal consonant follows, as in *rāma*.

(2) In the medial position, long *ā* has been more subject to nasalization than other vowels.

(3) In the final position *o*, *au*, *e*, *ai*, *i*, *u*, *ū*, show more cases of nasalization than *ā*. Thus no MS. writes *kā̃* for "of" *mārā̃* for "struck," but many write *kē̃*, *mārē̃*. This difference, however, may be an incident of flexion, the nasality in *kē̃*, for instance, may correspond to the nasal ending of *Apa. ka(y)ah̃*, and of *mārē̃* to the nasal endings of the 3rd person plural. But even if this historical dependence on an original nasal consonant be established, the extensive tendency to nasalization of finals stands out as a living fact in the language.

B. Medial independent nasalization also occasionally occurs in hiatus, and finds a parallel in Vedic, as in *ghanénam ekás* (Wackernagel, *Altindische Grammatik* I, p. 302). The following examples from Hindī works will illustrate this:—

kōi Man. *jo kōi yā māi phase* (Fol. 14a) "whoever is entangled in it."

Here *kōi* < *kovi* < *ko api*, and originally, in order to keep the two syllables *o* and *i* apart so as to intend two different words, the hiatus was maintained, and this was perhaps facilitated by nasality, being a tendency opposite to the glottal stop.

jū̃ "lice" < *yūkā* may similarly have got an intervocalic nasality in an intermediate **jūvā* or **jūyā*—where *v* or *y* was pronounced "light," i.e., like a vowel, as the Śikṣās¹ have noticed it.

Whether *kū̃ā* < *kūpaka* "a well," Bhavi. *kuvo*, may be taken under this head is not certain, for *jūā* < *dyūtaka* does not have the nasality. Perhaps further research may discover some dialects in which *jūā* has this nasalization.

garjēu "roared.:" Tul. *garjēu* "roared," *tinhi dekhi garjēu hanumānā* (Fol. 312b), "having seen them, Hanumāna roared." It must be admitted, however, that these examples cannot explain why in many other words (as in *jūā*) in the same language, the hiatus is not accompanied by nasality. But the

¹ Yājñavalkya Śikṣā (in Śikṣā-saṃgraha), verses 150 ff.; Nārada Śikṣā, *Ibid*, verses 16-18.

examples do indicate the probable existence of certain dialects in which the phenomenon was a normal tendency.

That "Sindhī liberally employs Anusvāra in hiatus" has been noticed by Trumpp (Sindhī Grammar, XV): cf. Si. *gaũ* "cow," *sukhẽũ* "vows," *kũat* "power" < Ara. *quwwat*, *kẽĩru* "coward" < *kātara-*, *qĩhu* "a day" = Lah. *dĩa* (< *divasa-* ?).

This intervocalic nasalization in Hi. Lah. Si. seems to be an inheritance from Vedic, though we do not find striking cases of the phenomenon in Pāli and Pkt. Perhaps it occurred in Apa. as in *jahẽ* < *yathā*, though it was not so transcribed.

(2) Final independent nasalization does not occur so copiously in Hindī literary works. A few examples indicate some tendency :

ekaũ "one": Tul. *avanĩ na āvat ekaũ tārā* (Fol. 310b) "not even a star comes to the earth;"

sayyẽ "bed": Cat. *cāturmāsa bhaumi sayyẽ kare* (Fol. 3a) "one should sleep on the ground for a quarter." The nasality, here, however, may be analogical from accusative singular.

dõ "two": Pāk. *dõ dina lõ mukha bẽdha ke rākhiye* (Fol. 45b), "one should keep the (cooking) utensil with its mouth closed for two days."

bhairõ "Bhairava-": KP *bhairõ juta gaurĩ* (Fol. 5a) "Gaurĩ accompanied by Bhairava." *bhairõ* is a common word for *Bhairava* in Hi., Panj. and Lah.

curẽ "hearth," "stove": Pāk. *maṭhā tā maṭ dāri dije, curẽ te utāri lije* (Fol. 47a) "put some curd in it and bring it down from the hearth." The nasality, here, however, may be a locative ending, analogical from the *-smin* termination.

vivhārẽ "in business": Sām. *vivhārẽ sampati jẽna* (Fol. 5a) "you should know that prosperity in business (will arise.....)."

Unless the locative here is analogical from the *-smin* ending, it is a probable case of independent nasalization, which may be illustrated even from the Prākṛita Pīṅgala (Edited by

Ghosha) where *jesū* occurs for Skt. *yeṣu* : *jesū uno nivaditū* (p. 634) "on which, again, has fallen."

trasahū "terrify": Tul. *sītahī bahū vidhī trasahū jāhī* (Fol. 310a), "go and terrify Sītā in many ways."

Sindhī and Lahndī have also occasional cases of such nasalization :

Si.	<i>subhā</i>	"morning"	< Ara.	<i>ṣubh</i>
	<i>cākū</i>	"knife"	< Turkish	<i>cāqū</i>
	<i>dārū</i>	"medicine"	< Persian	<i>dārū</i>
Lah.	<i>sītā</i>	(Nom. case)	< <i>sītā</i>	
	<i>mālā</i>	(„ „)	< <i>mālā</i>	
but	<i>dhroptī</i>	(„ „)	< <i>draupadī</i>	
	<i>pārbatī</i>	(„ „),	< <i>pārvatī</i>	

the final *ā* being nasalized, but not the final *ī*. This further seems to confirm the particular "nasalability" of *ā*.

General Conclusion.

The above study gives us the following points :—

(1) Nasalization in Hindī and allied languages is inherited from Vedic Skt. In the medial position, as in *pāchī* "bird" (Mar. Fol. 13a), it is not inherited from Prākṛit only, as Grierson supposes (JRAS., 1922, p. 384), but may be traced back, though in an embryonic stage, to Vedic times. Thus in the *Maitrāyaṇīya Samhitā*¹ a nasal was always substituted for a final *t* and a following *ś*, e. g., *tat śatam* became *tañ śatam*, *yat śamī* became *yañ śamī*.

Again, it is well-known that doublets like *gabhīrā-* and *gambhīrā-*,² *chad* and *chand*³ existed in Vedic. In Pāṇini's *Dhātupāṭha* these doublets become more copious : cf.—

<i>śrath</i>	and	<i>śranth</i>	"to be loose"
<i>vrh</i>	and	<i>vrnh</i>	"to grow"

¹ Schrader, *Zeitschrift der morgenländischen Gesellschaft*, Vol. 33, p. 185.

² According to St. Petersburg Lexicon *gabhīra-* is the older, regularly used form, while *gambhīra* appears only in the beginning of a Pada.

³ Cf. *Nighaṇṭu* III, 14; *Nirukta*, IX, 8.

<i>drh</i>	and	<i>dr̥ṃh</i>	"to be strong"
<i>laḍ</i>	and	<i>laṇḍ</i>	"to sport"
<i>trh</i>	and	<i>tr̥ṃh</i>	"to injure"
<i>lip</i>	and	<i>limp</i>	"to anoint."

(2) Nasalization is not necessarily connected "with the simplification of Sandhi conjunct consonants," as Grierson supposes (*Ibid*, p. 388), but may occur independently of this condition either medially or finally.

(3) Though the particular quality or the quantity of a vowel does not seem to be a necessary condition for nasalization, long *ā*, the open vowels and the diphthongs have been particularly subject to it.

(4) The tendency to nasalization seems to be part of a general tendency, observed by Indian Grammarians, called *Abhinidhāna*.¹ According to this, the speaker tended to avoid the full pronunciation of the final of a word or of a syllable under certain conditions.

It was a case of weak or lax utterance, in which the speaker, as in *tañ śatam*, escaped the inconvenience—or what was felt by him as an inconvenience—by exploding the air through the nasal passage.

(5) This tendency in modern Indian languages is particularly noticeable in foreign or unfamiliar words like *śaṅk*, *kṣṇi*, where the speaker seems to have felt it easier to avoid the full stress and quality of an unfamiliar syllable by nasalizing it.

¹ R̥gveda-Prātisākhya, II, 13 : Cārāyaṇīya Śikṣā, Chap. VIII, Fol. 8, 9.

ARYABHATA, THE FATHER OF INDIAN EPICYCLIC ASTRONOMY

BY

P. C. SENGUPTA, M.A.,

Lecturer in Indian Astronomy, Calcutta University.

1. From his own statement made in the *Kala-kriya* section of his *Aryabhatiyam*, we know that Aryabhata was born in the year 476 of the Christian era, that he wrote this famous book at the age of 23 and that his native place was most probably Kusumapura, Pataliputra or the modern city of Patna. Nothing else about him is known excepting what can be gathered from his work or works as an astronomer. So great was his position in this respect that whoever differed from him, was the subject of ridicule, even by men who could never aspire to be the author of a treatise on scientific Indian astronomy. ¹Brahmagupta in more than one instance rightly finds mistakes in Aryabhata's methods, but his expounder Chaturveda blindly supports the latter's method. So great was his fame that his mistakes even were taken as oracles and he was generally regarded as the "oldest of scientific Hindu astronomers," to quote Dr. Thibaut's phrase. Dr. Thibaut, however, from his critical study of the *Pañcha Siddhantika* could not lend support to this view, and would award "the merit of originality *as far as it goes*," to the unknown author of the old *Surya Siddhanta*." In the present paper it is proposed to discuss the work of Aryabhata as an astronomer alone and to establish that it was he who

¹ ब्रह्मगुप्तकविरच सुन्दरी साऽन्यथा तदनुगैर्विचार्यते । Bhaskara's *Goladhyaya*, IX, 17.

was the originator of the Epicyclic Astronomy in India and how far he can be held indebted to the Greek or any foreign systems of Astronomy.

From the Brahmasphuta Siddhanta, XI, we come to know that Aryabhata was the author of two works in both of which the planetary cycle of 4320000 solar years is adopted, but in one the beginning of the astronomical day is placed at sun-rise at Lanka, and in the other, the day is begun at midnight of the same city. In one the number of civil days in a Mahayuga of 4320000 years is 15779175 0 and in the other it is 1577917800. Thus in stanza 5, it is stated :

² “As in both the works, the number of sun’s revolutions is spoken of as 4320000, their cycle is clearly the same (*i.e.*, 4320000 years); why then is there a difference of 300 civil days in the same cycle of the two works ?”

Again in stanza 13, it is said :

³ “In 14400 years elapsed of the Mahayuga (4320000 years) there is produced a difference of one day in reckoning first from the midnight and then from the sun-rise.”

Varahamihira in his Pañcha Siddhantika, XV, 20, writes :

⁴ “Aryabhata maintains that the beginning of the day is to be reckoned from midnight at Lanka and the same teacher again says that the day begins from sun-rise at Lanka.”

The book which placed the beginning of the astronomical day at sun-rise at Lanka is undoubtedly the Aryabhatiyam. The other book has not been found out yet. In a paper read before a meeting of the Calcutta Mathematical Society held in February last (*i.e.*, 1928), I have established that the essentials

² युगरवि भगणाः ख्यमिति यत्प्रोक्तं तत्तयोर्धुगं स्पष्टम् ।

त्रिशती रव्युदयानां तदन्तरं हेतुना केन ॥५॥ B. S. Siddhanta, X, 5.

³ अधिकैः शतैश्चतुर्भिर्वर्षसहस्रैश्चतुर्भिरैकैः ।

युगयतिर्दिनवारान्तरमौदधिकं चैरात्रिकयोः ॥१३॥ B. S. Siddhanta, X, 13.

⁴ लङ्कार्धरात्रिसमये दिनं प्रवृत्तिं जगदा चाऽऽर्थं भटः ।

भूयः स एव सूर्योदयात् प्रभत्याह लङ्कारायाम् ॥ P. Siddhantika, XV, 20.

of Aryabhata's second work are to be found from the *Khandakhadyaka* of Brahmagupta in which he constructed a much simpler system of astronomical methods as would lead to the same results as those obtained from the work of Aryabhata. This work of Brahmagupta has, of late, been edited with Amraj's commentary by Pandit Babua Misra, and published by the Calcutta University. But before we proceed to describe and discuss Aryabhata's system of astronomy it would be perhaps proper to try to estimate him as an *observer*.

2. Aryabhata as an Observer.

In section Gola., 48, of his *Aryabhatiyam*, Aryabhata states how he determined the mean motions of planets :

“ For this work the sun has been determined from the conjunction of the earth (*i.e.*, the horizon) and the sun, and moon, from the conjunctions of the sun and the moon, similarly all the “star planets” have been found from their conjunctions with the moon.”

In a paper on the above stanza by the writer of this paper, and published in the *Bulletin of the Calcutta Mathematical Society*, Vol. XII, No. 3, it was proved that the year was determined by Aryabhata from the observation of the time that elapsed between the risings of a bright star and the sun at intervals of 365 and 366 days. That the sidereal month was deduced from the synodic month which again was most probably determined by observations of the time that elapsed between the settings of the sun and the moon at intervals of 29 and 30 days. By similar observation of intervals in which the moon overtook the “star planets,” *viz.*, Mercury, Venus, Mars, Jupiter and Saturn, their periods of revolution were determined by Aryabhata. In that paper

⁵ चिति रवि योगाद्दिन ऋद्ध रवीन्दुयोगात् प्रज्ञाधितथेन्दुः ।

शशिताराग्रहयोगात्तथैव ताराग्रहाः सर्व्व ॥ *Aryabhatiyam*, Gola., 48.

the mathematical theory in support of the method was discussed and proved. Further from a concrete example the sidereal period of the planet Mars was deduced to be 687.62 days nearly, the actual period being 686.9797 days and which according to Aryabhata is 686.99974 days.

In estimating whether the distance of the sun from a fixed star or from that of the moon from the sun or from that of a planet from the moon, his method appears to have been observing the time interval between the settings of two celestial bodies. In the whole of the Aryabhatiyam, the only instrument described is a form of clock generally known as the "*Svayam-vaha*" instrument. Thus runs the method for its construction :

° "Let an observer make a light globe of wood perfectly spherical and of even weight all round and let him turn it round in his selected unit of time through his intelligence by means of mercury, oil and water."

Evidently a form of water clock is meant, which is driven by a regular flow of water in it. How far the time intervals could be correctly estimated can not be judged without a special study of the various forms of "*Svayam-vaha*" instruments in use and how the time intervals were converted into the corresponding arcs of the ecliptic or of the equator are not stated. If proper methods are followed—and we know that proper methods could be followed—intervals in arcs could be found out. Such a mode of observation depended solely on the use of a form of clock. This was perhaps an advantage, as more complex instruments would bring in more instrumental errors. It is however not impossible that Aryabhata used also the graduated circle or the "*Chakrayantra*" or even a staff as a subsidiary instrument for the construction of which he thought no definite directions necessary.

° काष्ठमयं समवृत्तं समन्ततः समशुद्धं लघुं गोलम् ।

भारत तैलजलैलं भ्रमयेत् स्वधिया च कालसमम् ॥ Aryabhatiyam, Gola., 22.

Note.—Mr. Kaye, however, thinks that “the Hindu astronomers were not observers but calculators.” The great injustice of such a remark cannot be too strongly insisted on. His Hindu Astronomy was published in 1924 while my paper on the most significant stanza from the Aryabhatiyam, viz., Gola., 48, was published in the Bulletin of the Calcutta Mathematical Society in 1921. If he liked he could easily see that Aryabhata at least was not a “mere calculator.” As an observer the fame of Brahmagupta was greater than that of any other Indian astronomer. Not only were Aryabhata and Brahmagupta observers but all Indian astronomers who applied the correction named *Vija* to the places of planets as calculated from the Siddhantas were certainly observers. To this class belonged, to mention only a few, Varahamihira, Lalla, Prithudaka, Durga Singha, Tribikrama, Kesaba, Ganesha, as also the Bengalee astronomer Raghabananda. Even in our own time Mm. Chandrasekhar Sinha of Orissa, has been styled by the scientific British journal “Nature,” as a modern Tycho Brahae.

One more corroboration of the fact that the Hindu astronomers were not mere calculators is furnished by the following stanzas from the Sakalya Samhita:—

त्रिषष्टि पञ्चवक्त्रोन्मू द्वित्रयोऽर्थार्थदृक्शराः ॥१५८॥

शरेन्मूद्विजवक्त्रि त्रिगोवेदाब्धिवक्त्रयः ।

शराः शतं द्विद्विदास्तारासंख्यासुगरश्चिभात् ॥१६०॥

अश्वयोनि क्षुरप्रस्थं शकटैर्न शिरोनिभम् ।

माणिक्य गृहवाणाभं चक्रप्राकार सन्निभम् ॥१६२॥

हे पर्यङ्कनिभे हस्तो मुक्ता विद्रुमसन्निभम् ।

तोरणं बलिशङ्काशं कुण्डलं सिंहपुच्छवत् ॥१६३॥

स्तम्भेरमरदाभं च तथा शय्यानिभं स्मृतम् ।

गजकर्णाकृतिः कर्णः शृङ्गाटकनिभोऽभिजित् ॥१६४॥

मृदङ्गसदृशं तद्वत् वृत्ताकारं तथा पुनः ।

उभेशय्यानिभेतद्वत् मृदङ्गसदृशं पुनः ॥१६५॥

These give the number and configuration of the stars in each *nakshatra* or lunar mansion.

It was probably owing to the very defective knowledge of Sanskrit that is shown in Mr. Kaye's writings that he could be led away by such an idea. Being himself unable to translate some well-known passages from Brahmagupta he used the mistranslation of Al Biruni—a case of one blind man being led by another blind man—the latter being indeed more candid than the former. He makes up a big bibliography in his “Hindu Astronomy”—but it is one thing to draw up a showy list of books, while it is quite a different thing to use it fully and profitably. *Vide* Kaye's Hindu Astronomy, pp. 60, 46, etc.

3. Aryabhata as a Systematizer.

We have next to consider Aryabhata as a systematizer. In the same book, the *Aryabhatiyam*, he says that “The spotless jewel of true knowledge, which lay so long sunk in the ocean of knowledge full of truth and error, has been raised by me therefrom by using the boat of my own intelligence, by the grace of God whom I worship.”

सदसज्ज्ञानसमुद्रात् समुद्धतं देवताप्रसादेन ।

सज्ज्ञानोत्तमरत्नं मया निमग्नं स्वमतिनावा ॥ Gola., 49.

If we take this statement as it is, we are to understand that there was really an “ocean of knowledge full of truth and error” or that there was a vast amount of astronomical observation records which were full of errors and truth as also perhaps unsystematized astronomical treatises full of error and truth, in the same way. The astronomical observation records are now lost, perhaps they were considered useless after the *Aryabhatiyam* was composed. We can only hope to find out some of the astronomical treatises which existed before Aryabhata.

4. The Siddhantas before the time of Aryabhata.

None of the existing Siddhantas which are spoken of as revelations can be taken to represent the true state of astronomical knowledge that existed before the time of Aryabhata. For as Bhaskara rightly observes : सच आगमो महताकालेन लेखका-
ध्यापकाभ्येष्टदोषैर्वद्बुधा जातः । i.e., "the same science as handed down by tradition has taken manifold forms in the course of long ages through the faults of transcribers, teachers and pupils." The oldest Siddhantas being not available in the original forms we have invariably to depend on the summary of them in the Pañcha Siddhantika of Varahamihira. Even here we shall not quite be justified in assuming that the original Siddhantas which Varahamihira summarises in his work, did not receive any drastic changes at his hands. He speaks of the Surya Siddhanta as being "more accurate" than the Paulisha and the Romaka Siddhantas. The words "more accurate" (स्यष्टतर) appears suspicious. It most probably means that the Surya Siddhanta was made "more accurate" by Varahamihira himself by taking the astronomical elements from other sources. For Bhattotpala (966 A.D.) in his introductory salutations of his commentary on the Brihat Samhita of Varahamihira observes :—⁷

"Let my devout salutations be to Sun the resplendent, of whom thus speak the men who have attained beatitude, that He, fearing lest the Jyotisha Shastra which He had made with the three great sections of *Hora*, Astronomy, and Natural Astrology would be effaced from the earth in the Kaliyuga, has again through the medium of Varahamihira made everything anew on a smaller scale."

⁷ यच्छास्त्रं सविता चकार विपुलेः स्वान्धैस्त्रिभिर्ज्योतिषं
तस्योच्छिन्तिभयात् पुनः कलियुगे संस्मृत्य यो भूतलम् ।
भूयः स्वल्पतरं वराहमिहिरं व्याजिनं सर्वं व्यधा ।
दित्यं यं प्रवदन्ति सोचकुशलास्तथैव नमो भासते ॥

Here is thus a clear admission of the fact that with the rise of the works of Aryabhata, the old Surya Siddhanta had already lost much of its reputation and sunk almost into insignificance, from which position it was rescued by Varahamihira by reconstructing it on the new lines. As a writer of a practical treatise on astronomy, he was perfectly justified in doing so. We can therefore conclude that all the five *Siddhantās* or treatises on astronomy, viz., the Paulisha, Romaka, Vasistha, Saura and the Paitamaha Siddhantas to have been all extant in the older forms before the time of Aryabhata. Of the Romaka Siddhanta we know that its calculations start from 427 of the Saka era or 505 of the Christian era; the same must be held to be the date of the Paulisha Siddhanta. The Romaka and the Paulisha Siddhantas were expounded by *Lātadeva* according to Varahamihira; hence the date 427 of the Saka era must be taken as Lāta's time—who thus becomes a contemporary of Aryabhata. These works as their names suggest should represent the sum-total of Greek Astronomy that was transmitted to India. Here also we are to use the greatest possible caution, for we cannot say that Lātadeva had not made distinct additions to the original Paulisha Siddhanta in order to make it up-to-date. In absence of other evidence we should compare the astronomical elements of the *Syntaxis* with those of the Paulisha and Romaka Siddhantas, and try to separate the true Greek elements from the Indian elements mixed up with them. But before we proceed to do that, it is better to consider the Vasistha Siddhanta of Varahamihira—which the summariser or any previous writer most probably left untouched. The crude form of Astronomy that it reveals, points to an age which evidently must be held prior to the time when Greek Astronomy was transmitted to India. We shall consider the Surya Siddhanta of Varahamihira. when we begin to discuss the Astronomy of Aryabhata.

In the following examination of the Vasistha Siddhanta, I have taken nothing for granted as Mm. Sudhakara Dvivedi, or Dr. Thibaut, who followed him has done. They have taken for granted that the two-fold planetary inequalities, *viz.*, irregularity due to the apsis and that due to the *Sighra* attraction as they are called in Indian Astronomy, were known to the author of this Siddhanta. This, of course, is a big assumption. In this paper the various data are taken as they are stated.

5. The Vasistha Siddhanta of Varahamihira

From chapter II, stanzas 2—6, we learn that the moon moves through 111 revols— $\frac{3}{4}$ signs + $\frac{2}{2971}$ signs in one *ghana* period of 3031 days; from which it is seen that 15820583 revolutions of the moon are performed in 432244848 days. Thus the sidereal month consists of 27·32167063 days. It is further clear that $\frac{248}{9}$, $\frac{3031}{110}$, the two convergents to the anomalistic month also were known to its author. Hence taking the latter convergent we get for the length of the anomalistic month to be 27·554 days. We can deduce also that the period of moon's apogee is 3232·873219 days. There seems to have been some rules for finding the apparent position of the moon also; but as the text in that place is hopelessly corrupt, no further information on this point can be elicited.

Having obtained the sidereal month determining the mean position of the moon on any given day, I tried to find some rule for finding the mean longitude of the sun. But unfortunately the text fails here also to teach us how to do this. To make up for this omission I had to adopt the synodic month as given in the Aryabhatiyam, consisting of 29·530582 days. I now found the sidereal year to consist of 365·25910036 days which was in excess of the true length by about 4 min. According to the Aryabhatiyam the year consists of 365·25868005 days.

I now pass on to the last chapter of the Pañcha Siddhantika, the only other place where the Vasistha Siddhanta was summarised. In the first half of the chapter are given the rules for finding the places of planets after their conjunctions with the sun. Stanzas 1—5 treat of Venus. From them we gather that the synodic period of Venus = $(584 - \frac{1}{11})$ days. Now adopting the year of 365·2591 days I found the sidereal period of Venus to be 224·69992 days, while the true period is 224·7028 days and according to Aryabhata it is 224·6981 days. Then follows the *Chāra* or apparent motion which may be tabulated as follows:—

	(i)	(ii)	(iii)
Days elapsed since a Sup. Conjunction =	60	120	180
Venus's motion in longitude =	74°	147°	219°

The remainder of the text is hopelessly incorrect on this point. The “drastic emendations” of Pandit Sudhakara at this place, appear unwarranted. From the column (iii) it is possible to deduce that Venus's *Sighra* periphery,—its distance from the sun when the distance of the earth from the sun is 360, to be $255\frac{1}{2}$ nearly. It is 261 according to Aryabhata.

Having given rules for finding the position of Venus the text next proceeds to describe the *Chāra* or motion of Jupiter. This is quite in keeping with the Hindu tradition. To a Hindu the time for *Upanayana* or initiation into the Vedas should be such that both these planets should be visible by the naked eye. Thus Jupiter's motion should be next described. Aryabhata's order of treatment of planets is either Mercury, Venus, Mars, Jupiter and Saturn or Saturn, Jupiter, Mars, Venus and Mercury. In the second half of the last chapter of the Pañcha Siddhantika, the order in which the planets are treated is the weekday order, which is the rule with all subsequent writers. This is however by the bye.

The stanzas 6—13, describe Jupiter's motion from which we gather that the synodic period is $= (399 - \frac{1}{9})$ days. This combined with the length of the year adopted gave me 4332.41 days to be the sidereal period of Jupiter; according to the Aryabhatiyam it is 4332.27216 days, the modern value of it is 4332.588 days. The apparent motion of Jupiter is then stated as follows :—

Days elapsed since Conjunction =	60	100	124	139	199	259	339	384	414
Jupiter's motion in longitude =	12°	16°	18°	18°	12°	6°	18°	27°	42°

The text was found to be quite correct and no emendation was thought necessary by the editors. From such a statement it is possible to separate, though with very questionable accuracy, the equations of apsis and the *sighra* equations or the annual parallax of the planet, but it is not possible to calculate the apparent longitudes of the sun or to fix the apse or the aphelion point of Jupiter. The point that is of special importance is that conjunctions here spoken of, are not with respect to the mean sun, but with respect to the apparent sun. The above statement of apparent motion, appears rather of a mean of a certain number of observation results, obtained in different synodic periods. If the writer of this Siddhanta knew of the "two-fold planetary inequalities," he would have stated the longitudes of the apsides of both of the sun and Jupiter and of their longitudes at the time of at least one conjunction, as also the other necessary astronomical elements. It is rather of doubtful utility to apply any correct method for separating the equations of apsis and of conjunction to such a statement as is given above. If this statement of motion is really a mean of a series of observation results obtained from a large number of synodic periods of Jupiter, then the equations of apsis would be naturally

eliminated. On a closer examination however it appears that the equation of apsis is not altogether eliminated. The residue arising out of this cause, is rather drastically treated and attempts are made to determine what is called the *Sighra* periphery of Jupiter. The term *Sighra* periphery of a superior planet means the distance of the earth from the sun when the distance of the planet from the sun is taken to be 360. My only reason for taking this step was that the true equations of apsis and those of conjunction, cannot be determined unless we take the "true" observation results as distinct from the mean results which appear to be given in the above statement. The mean results would help to determine only the mean equations of conjunction. Similar remarks apply to the apparent motions as given in the case of other planets in this *Siddhanta*, and in the case of the planets in the *Paulisha Siddhanta*.

I proceeded in the following way to determine its *Sighra* periphery :—

Days elapsed since conjunction =	60	100	124	139	199
Jupiter's motion =	12°	16°	18°	18°	12°
Jupiter's mean motion =	4°59'	8°18'34"	10°18'14"	11°33'	16°32'9"
Jupiter's <i>Sighra</i> equation =	7°1'	7°41'36"	7°41'46"	6°27'	—4°32'9"
Jupiter's <i>Sighra</i> anomaly =	54°9'	98°33'37"	111°54'40"	125°26'55"	179°35'36"

I found thus that for the *Sighra* anomaly 179° 35' 36" the *Sighra* equation to be —4°32'9". It is evident that when the *Sighra* anomaly is 180°, the corresponding equation should vanish. I took this —4°32'9" to be the residual equation which was not eliminated. The mean residue was taken at 54' at each stage. I then corrected the figures in the 1st column as follows :—

Days elapsed since conjunction = 60

Jupiter's apparent motion = 12°54'

Jupiter's mean motion = $4^{\circ}59'$

„ *Sighra* equation = $7^{\circ}55'$

„ *Sighra* anomaly = $54^{\circ}9'$.

Hence the *Sighra* periphery worked out to be $68^{\circ}40'$; the mean value of it according to the Aryabhatiyam = $69^{\circ}45'$, according to the Khandakhadyaka it is 72° .

Note:—If the residue of $-4^{\circ}32'9''$ be distributed in proportion to the days elapsed since conjunction, the part of it in the first stage would be $1^{\circ}22'32''$ and Jupiter's motion in 60 days would be $13^{\circ}22'3''$, the *Sighra* equation would be $8^{\circ}23'3''$. The *Sighra* periphery would work out to be $73\frac{1}{4}^{\circ}$ nearly.

The stanzas 14—20 teach us how to find the longitude of Saturn. We infer that Saturn's synodic period = $378\frac{1}{5}$ days. By taking the sidereal year to consist of 365.2591 days as before, the sidereal period of Saturn was deduced to be 10755.04565 days. In half the synodic period, *i.e.*, 189 days, Saturn's mean motion becomes = $6^{\circ}18'41''.86$ and his *Sighra* anomaly would be = 180° nearly. The *Chāra* or apparent motion is stated as follows:—

Days elapsed since Cojunction =	16	72	127	195
Saturn's apparent motion in longitude =	3°	$6^{\circ}52'$	$6^{\circ}52'$	$3^{\circ}52'$

The apparent motion of Saturn in 189 days was deduced to be $4^{\circ}8'$; the mean motion in the same period being $6^{\circ}18'47''$, the *Sighra* equation for 180° of *Sighra* anomaly came to be $-2^{\circ}10'42''$ which was the residue in 4 stages. At each stage it was taken at $32'15''$. Saturn's apparent motion in 72 days was taken to be $7^{\circ}56'42''$ and the *Sighra* periphery worked out to be 39° nearly; its mean value according to the Aryabhatiyam is $38^{\circ}15'$ and according to the Khandakhadyaka it is 40° .

The stanzas 21—35 treat of the motion of Mars. We discern that the synodic period of the planet is = 780 days— $261 \text{ vinādis} = 779.9275$ days. The deduced sidereal period of Mars becomes 686.99625 days. The modern value if it is 686.9797 days, according to Aryabhata it is 689.99974 days. The statement of motion in longitude since a conjunction as given in the text is so very faulty that I have not yet been able to make anything out of it.

The stanzas 36—56 describe the motion of Mercury. From all of which what can be safely deduced is that the synodic period of Mercury = 115.879167 days. This combined with the length of the year adopted gives the sidereal period to be of 87.97039 days. According to the Aryabhatiyam it is 87.9699 days while the modern value = 87.9698 days.

Note:—The text up to the stanza 56, in the case of each planet, gives first the synodic period, then the sidereal period and then the *Chāras* or the apparent motion of the planet in terms of days elapsed since conjunction. From the meaning elicited by Pandit Sudhakara Dvivedi and Dr. Thibaut on the sidereal motion, two alone, *viz.*, that of Jupiter and Saturn, are reliable. I found from their interpretation that the sidereal period of Jupiter = 4332.25 days and that of Saturn = 10765.7355 days nearly. When I tried for the sidereal period of Mars, from their meaning I got 650 days only for its value which is evidently wrong. As to the sidereal revolutions of Venus and Mercury, their interpretation led me to 365.2605 days and 366.5 days nearly. Both these values should have been equal to the length of the sidereal year. In the first case the error comes to about an excess of 5.6 min. per year while the latter is hopelessly inaccurate. Neither of these could I take as the real length of the year as accepted by the author of the *Vasistha Siddhanta* of the *Pañcha Siddhantika* owing to the doubtful nature of the text at those places. It was therefore a necessity for me to stick to the length of the year = 365.25910036 days, as accepted above. I

am strongly inclined to this hypothesis that the solar year of this book was deduced from the synodic month. The reasons for this assumption are (1) that the author could get at a very accurate length of the sidereal month and (2) that he could also find a fairly accurate length of the anomalistic month. He should therefore have found the motion of the sun with the help of that of the moon.

In the whole of the summary of this work as given in the Pañcha Siddhantika, there is no evidence that the author could arrive at any of the relations of spherical astronomy. He uses the gnomon but is not able to calculate the sun's longitude accurately. He is also unable to calculate the length of the day, his rule belongs to the pre-scientific state of Hindu astronomy and is similar to that of Jyotisha Vedanga. His rule for finding the ecliptic point on the eastern horizon is also equally approximative. He speaks of the signs of the zodiac. The astronomy revealed in this old Vasistha Siddhanta is peculiarly similar to the Babylonian astronomy, as will appear from the following extract from the Encyclopædia Britannica, History of Astronomy.

6. Babylonian Astronomy.

"With the Babylonians.....their science lacked the vital principle of growth imparted to it by their successors. From them the Greeks derived their first notions of Astronomy. ^s*They copied the Babylonians asterisms, appropriated Babylonian knowledge of the planets and their courses and learned to predict the eclipses by means of the "Saros".* This is a cycle of 18 years 11 days or 223 lunations, discovered at an unknown epoch at Chaldea, at the end of which the moon very nearly returns to nodes and perigee. There was no getting back to the beginning of astronomy by the shores

^s Cf. Des Claudius Ptolemæus Handbuch der Astronomie, Vol. II, edited by Karl Manitius (Teubner, Leipzig, 1913) pp. 99-100,

of the Euphrates. Records dating from the reign of Sargon of Akkad (3800 B.C.) imply that even then the varying aspects of the sky had been long under expert supervision. Thus early, there is reason to believe that the star groups with which we are now familiar began to be formed. They took shape most likely, not through one stroke of invention but incidentally as legends developed and astrological persuasions became defined. The zodiacal series in particular seems to have been reformed and reconstructed at wide intervals of time. Virgo for example is referred by P. Jensen, on the ground of its harvesting association, to the fourth millenium B.C. while Aries (according to F. K. Ginzel) was interpolated at a comparatively recent time. In the main however, the constellations transmitted to the west from Babylonia by Aratus and Eudoxus must have been arranged very much in their present order about 2800 B.C. E. W. Maunder's argument to this effect is unanswerable. For the space of the southern sky left blank of stellar emblazonments observation was centered on the pole; and since the pole shifts among the stars through the effects of precession by a known annual amount, the ascertainment of any place for it, virtually fixes the epoch. It may then be taken as certain that the heavens described by Aratus in 270 B.C. represented approximately observations made some 2500 years earlier in or near north latitude 40° . In the course of ages, Babylonian astronomy, purified from the astrological taint, adapted itself to meet the most refined needs of civil life. The decipherment and interpretation by the learned Jesuits, Fathers Epping and Strassmuir, of a number of clay tablets preserved in the British museum have supplied detailed knowledge of the methods practised in Mesopotamia in the 2nd century B.C. They show no trace of Greek influence and were doubtless the improved outcome of an unbroken tradition. How protracted it had been can be in a measure estimated from the length of the

revolutionary cycles found for the planets. The Babylonian computers were not only aware that Venus⁹ returns in almost exactly eight years to a given starting point in the sky, but they had established similar periodic relations in 46, 59, 79, and 83 years severally for Mercury, Saturn, Mars, and Jupiter. They were accordingly able to fix in advance, the approximate positions of these objects with reference to ecliptical stars which served as fiducial points for their determination. In the ephemerides published year by year, the times of the new moon were given, together with the calculated intervals to the first visibility of the crescent from which the beginning of each month was reckoned; the dates and the circumstances of solar and lunar eclipses were predicted, and due information was supplied as to the heliacal risings and settings, conjunctions and oppositions of planets. The Babylonians knew of the inequality in the daily motion of the sun; but misplaced by 10° , the perigee of his orbit. *Their sidereal year was $4\frac{1}{2}$ min. too long, and they kept the ecliptic stationary among the stars making no allowance for the shifting of the equinoxes. The striking discovery on the other hand, has been made by Rev. F. X. K  gler that the various periods underlying their lunar predictions were identical with those heretofore believed to have been independently arrived at by Hipparchus, who accordingly must be held to have borrowed from Chaldea, the lengths of the synodic, sidereal, anomalistic and draconitic months."*

It is evident that Vasistha Siddhanta does not show the least trace of any Greek influence. The use of signs of the Zodiac need not be imagined to be a Greek mode. The naming of the signs of the Zodiac is to be ascribed to the Babylonians and not to the Greeks.

I have shown above that given the *idea alone* of an epicyclic astronomy it is possible to develop it to some extent

⁹ *Ibid*,

even from the old Vasistha Siddhanta—as known to Varahamihira. It is further clear that Aryabhata's system of astronomy could not be developed from this Siddhanta since much better results of observation were necessary for its construction. For reasons which will be set forth later on I feel strongly in favour of a hypothesis that the old Surya Siddhanta was of the same type as this Vasistha Siddhanta, only perhaps with this difference that it had a much better system of astronomical elements and tables of equations. I now proceed to examine the Paulisha Siddhanta as given by Varahamihira and spoken of by him as expounded by Lātadeva who was a contemporary of Aryabhata.

7. The Paulisha Siddhanta of the Pañcha Siddhantika.

This Siddhanta is spoken of by Varahamihira as being more accurate than the Paitamaha and the Vasistha Siddhantas, and we may accept his statement as correct. The portions of the text of the Pañcha Siddhantika which describe the Paulisha Siddhanta are also in many instances faulty in the extreme. The rules given for calculating the number of civil days elapsed since 427 of the Saka era elapsed are very obscure owing to the defective nature of the text. With great difficulty I have been able satisfactorily to correct ¹⁰ the stanzas

¹⁰ The text without emendation. Emended parts of the Text.

दिग्ना साष्टनवरस
दिवसा ऋतुसप्तनवभक्ताः ।
पौलिशसतेऽधिसासा-
स्त्रिंशत् दिनान्ववम संशेषा ॥
तिथिदशमयय दद्या-
दधिसासार्थं स्वरास्वरेः काब्दैः ।
अवसार्थं पञ्चक्रता-
द्विकुमितैस्तिथि शिवांशेष ॥
अधिसासकेषु भूयो-
प्ये कौकसु खपञ्चकेन्द्रियांशेषु ।
देवोवसेषु ह्ययो-
नवसप्त द्विखयमेषु ॥

दिग्ना साष्टनवरसाः
दिवसाः ऋतुसप्तनवभक्ताः ।
* * *
* * *
तिथिदशांशमय दद्या-
दधिसासार्थं स्वरास्वरेः काब्दैः ।
* * *
* * *
अधिसासकेषु भूयो-
प्ये कौकसु खपञ्चकेन्द्रियांशेषु ।
* * *
* * *

in respect to the intercalary months. It uses a time unit called a *Saura* (solar) day which is the time the sun takes to describe a degree of the ecliptic with his mean motion. The first step in calculating the number of civil days elapsed since 427 of the Saka is to calculate the *Saura* days elapsed. This is very easy to perform. We are to multiply the number of years elapsed by $12 \times 360^\circ$ and to it add the months elapsed multiplied by 30, and to the sum finally add the *Saura* days elapsed; it then proceeds to find the intercalary months in the following way:—If I denotes the intercalary months for A *Saura* days, the rule says:—

$$I = \left(\frac{10A + 698}{9764} + \frac{A}{90 \times 107 \times 360} \right) \left(1 + \frac{I}{500000} \right)$$

In chapter III of the *Pañcha Siddhantika* the stanza 1 gives the length of the year adopted by the Paulisha Siddhanta; it says that 43831 days are comprised within 120 years. It thus employs a cycle of 120 years in the case of the sun. As $120 \times 36000 = 4320000$, the number of years in a Mahayuga, I obtained from the above equation for intercalary months the following lunisolar mean motions:—

In 4320000 years there are $43831 \times 36000 = 1577916000$ days.

The number of *Saura* days = 1555200000.

The number of intercalary months = 1593242.

The number of solar months = 51840000.

The number of synodic months = 53433242.

The number of sidereal months = 57753242.

According to Aryabhata there are in 4320000 years 1577917500 civil days, 53433336 synodic months and consequently 57753336 sidereal months. It is thus clear that the Paulisha elements are different from those of Aryabhata and

show the latter's independence in respect of lunisolar mean motions. According to Paulisha Siddhanta :—

The year consists of $=365\cdot258\dot{3}$ days,
the synodic month $=29\cdot530558$ days,
the sidereal month $=27\cdot321697$ days.

Aryabhata's corresponding figures are $365\cdot25868005$ days, $29\cdot530582$ days and $27\cdot32166852$ days respectively. The sun's equations of the centre are given in the following form :—

Degrees of Anomaly =	10°	40°	70°	100°	130°	160°	...
Equations =	21'	96'	139'	140'	108'	50'	...

The first figure of the equations, *viz.*, 21' seems to be wrongly calculated. If we rely on the equations given in the remaining columns, the value of the circumference of the epicycle amounts to $15^{\circ}8'$, where the circumference of the deferent is 360° . Now if we take this to be the dimension of the sun's epicycle, the table of equations for the same values of anomaly becomes :

Degrees of Anomaly =	10°	40°	70°	100°	130°	160°	...
Equations of the centre =	24'	90'	134'	143'	113'	51'	...

Hence the mean value of the periphery of the sun's epicycle should be taken at $15^{\circ}8'$; while according to Aryabhata it is $13^{\circ}30'$ or even 14° showing that his circumference of the epicycle could not be worked out from the Paulisha table of the sun. It may appear that my results are different from those of Dr. Thibaut and Mm. Sudhakara Dvivedi, who have worked out another set of values of the equation from the hypothesis that the sun's maximum equation of the centre is $2^{\circ}29'$, their method of working

out being the method of Surya Siddhanta. According to Ptolemy, the radius of the epicycle is $2^p 30'$ while the radius of the deferent is 60^p . Hence in his view the periphery of the sun's epicycle is 15° . Thus in the case of the sun the Paulisha epicycle is nearer to Ptolemy's, but is much larger than Aryabhata's. One more important point in connection with the apparent motion of the sun is that this Siddhanta probably took the longitude of the sun's apogee to be 80° , as pointed out by Dr. Thibaut. We next consider the lunar theory.

Lunar Theory of the Paulisha Siddhanta.

The text of the Paulisha Siddhanta is hopelessly corrupt at the place where it treats of the moon's apparent motion. Most probably the author knew of the same two convergents to the anomalistic month, *viz.*, $\frac{248}{9}$ da. and $\frac{3031}{110}$ da. as were known to the author of the Vasistha Siddhanta. But it has not yet been possible to discover what were the different equations of the centre for the different values of the anomaly. No idea can be given as to what might have been taken for the dimension of the epicycle of the apsis of the moon. We learn also that the sidereal period of the revolution of the nodes to be $6794 \cdot 6854312$ days and according to Aryabhata this is $6794 \cdot 749511$ days. Moon's greatest latitude is stated to be $270'$ or $4^\circ 30'$ as in all Indian Siddhantas.

Planetary Motions—Mars.

We next turn to the motion of the planets, Mars, Mercury, Jupiter, Venus and Saturn, as treated in the Paulisha Siddhanta. This is given in the last half of the last chapter of the book. Motion of Mars according to this Siddhanta is given in chapter XVII, stanzas 66—69. The days are given in *saura* days as explained above, as we learn from the 66th stanza. The synodic period is indicated to be $768\frac{3}{4}$ *saura* days; these days reduced to civil days with the help of the

Paulisha year become equal to 779·9787 days. The *chāras* are stated in the following way from the time of conjunction:—

(A)	<i>Saura</i> days elapsed since Conjunction =	36	224	332	404	472	712	768
(B)	Mars's elongation or the true <i>sighra</i> anom. =	15°	75°	135°	225°	275°	345°	360°
(C)	Mars's apparent motion =	21°	149°	197°	179°	197°	367°	408°
(D)	Mars's mean motion =	19°8'	119°6'	176°31'	214°45'	250°58'	378°35'	408°21'
(E)	Mars's <i>sighra</i> equation =	+1°52'	+29°54'	+20°29'	-35°49'	-53°58'	-11°35'	-21'

The figures in the rows (A) and (B) are alone given in the text; the row (C) is obtained by subtracting the terms of the row (B) from the corresponding terms of the row (A). The row (D) of mean motion has been calculated from the sidereal period in *saura* days deduced from the synodic period. The row (E) is got by subtracting the row (D) from the row (C). On examination of the last column it appeared to be fairly correct. I then thought that the equation should vanish in half the synodic period, when the elongation should be 150°, hence the apparent and the mean motions should be both = 204°. But when I tried to find from the figures given, the elongation in 384 *saura* days, it came to be 200°, which was in excess by 20°. This I divided into 4 stages at 5° at each stage. The rectified figures now stood as follows:—

	(I)	(II)	(III)	(IV)
<i>Saura</i> days since Conjunction =	36	224	332	384
Mars's elongation =	10°	65°	120°	180°
, apparent motion =	26°	159°	212°	204°
„ mean motion =	19°8'	119°6'	176°31'	204°
„ <i>sighra</i> equation =	6°52'	39°54'	35°29'	0°

For the determination of Mars's *sighra* periphery I now took the figures in columns (II) and (III) obtained above and worked out the *sighra* periphery to be $249^{\circ} 15'$ nearly. According to Aryabhata it is 234° , while according to Ptolemy it is 237° .

Mercury.

We are next given the motions of Mercury in the following stanzas, *viz.*, 70-72. From them we gather that the synodic period of the planet = $\frac{3319}{29}$ *saura* days = 115.875 civil days. The apparent motion of Mercury is stated in the following way :—

	(i)	(ii)	(iii)					
No. of <i>saura</i> days since last inferior Conjunction—	10	24	42	57	72	90	106	114
Elongation =	12°W	22°W	13°W	0°*	13°E	22°E	14°E	5°E
Motion in <i>sighra</i> anomaly since inf. Conjunction =	31°31'*	75°39'*	132°23'*					
Ext. angle of elongation at the planet =	43°31'*	97°39'*	145°23'*					

The figures marked with an asterisk were deduced from the data. As in half the synodic period the elongation vanished, it was not necessary to make any attempt to correct the figures given. I took the figures in the columns (ii) and (iii) and the mean value of the planet's *sighra* periphery worked out to be $139^{\circ} 20'$ nearly. According to Aryabhata it is 135° and according to Ptolemy also it is 135° .

Jupiter.

Stanzas 73-75 treat of Jupiter and we are taught that the synodic period of Jupiter is $\frac{2752}{7}$ *saura* days or 397.968

civil days. The apparent motion of Jupiter is given as follows :—

	(i)	(ii)	(iii)	(iv)				
<i>Saura</i> days elapsed since last Conjunction =	16	70	140	197	249	337	377	393
Elongation =	12° (-41')	56° (-1°22')	120° (-2°2')	182°45' (-2°45')	240°	316°	348°	360°
<i>Sighra</i> anomaly =	14°39'*	64°6'*	128°12'*	180°*				
<i>Sighra</i> equation =	3°20'*	10°28'*	10°14'.	0°				

Here also the figures marked with an asterisk were deduced from the data of the text. The corrections to the elongations are given under each figure. Here also the mean value of the *sighra* periphery was worked out from columns (ii) and (iii) and found to be 76°18' nearly. According to Aryabhata it is 69°45' or 70° and according to Ptolemy it is 69°.

Venus.

The stanzas 76-78 treat of Venus. We learn that the synodic period of Venus is $575\frac{1}{2}$ *saura* days = 583·9061 civil days. The apparent motion after an inferior conjunction is given in the following way :—

	(I)	(II)	(III)		
Civil days elapsed since inf. Conjunction =	5	20	84	248	296
Elongation =	9°W	30°W	45°W	10°W	0°
Motion in <i>Sighra</i> anomaly =	3°5'*	12°20'*	57°47'*	152°52'*	1·0°*
Ext. angle of elongation at the planet =	12°5'*	42°20'*	102°47'*	162°52'*	180°*

As before the figures marked with an asterisk are deduced from the data. It will be seen from the above that in this case the days are not the *saura* days, they are to be taken as civil days instead. I had to reject the emendations of Pandit Sudhakara in respect of the statement of the number of days elapsed since conjunction. I used the figures in columns (I), (II) and (III) and worked out the *sighra* periphery to be $265^{\circ}45'$ nearly. Aryabhata's mean value of the periphery is 261° and that of Ptolemy is 259° .

Saturn.

Lastly, the stanzas 78—81 speak of the motion of Saturn. We are taught that the synodic period of Saturn is $\frac{1118}{3}$ *saura* days or equal to 378.11 civil days. The apparent motion is given in the following manner :—

	(I)	(II)	(III)					
<i>Saura</i> days elapsed since Conjunction =	18	116	130	186.5	243	341	354	373
Elongation =	$16^{\circ}30'W$	$107^{\circ}W$	$120^{\circ}W$	$180^{\circ}W^*$	$240^{\circ}W$	$331^{\circ}W$	$343^{\circ}30'$	360°
<i>Sighra</i> anomaly =	$17^{\circ}23'^*$	$112^{\circ}4'^*$	$125^{\circ}35'^*$	$180^{\circ}*$	...	...	...	...
<i>Sighra</i> equation =	$53'^*$	$5^{\circ}4'^*$	$5^{\circ}35'^*$	$0^{\circ}*$	...	...	...	...

The asterisks convey the same meaning here as before. The elongation for 186.5 days came out to be 180° and there was no necessity for correcting the given elongations. The mean *sighra* periphery was worked out to be $36^{\circ}51'$ from the columns (II) and (III). According to Aryabhata the mean periphery is $38^{\circ}15'$ and according to Ptolemy it is 39° .

Spherical Astronomy of the Paulisha Siddhanta.

We now turn to the spherical astronomy of the Paulisha Siddhanta. Chapter III, stanzas 10—12 give us rules for

finding the ascensional differences for the signs of the Zodiac. We readily conclude that the author of the Siddhanta was acquainted with the rule for finding the length of the day, viz., the equation

$$\begin{aligned} & R \sin (\text{ascensional difference}) \\ &= R \tan \phi \tan \delta \text{ or its equivalent in any other form.} \end{aligned}$$

Passing on to the treatment of the lunar eclipse we notice that the lunar ecliptic limit is stated to be 13° ; the sum of the semi-diameters of the moon and the shadow is assumed to be $55'$. The difference of their semi-diameters is $21'$. Hence the semi-diameter of the moon is $17'$ and that of the shadow is $38'$.

The rule for finding the *Aksha Valana* is also very rough. It is the angle between the great circles joining the centre of the moon to the celestial pole and to the north point of the horizon, and is given to be $= \frac{\text{Zenith distance} \times \text{latitude}}{90}$, both the zenith distance of the moon and the latitude of the station being expressed in degrees.

In the treatment of the solar eclipse we find that the parallax in longitude expressed in time, i.e., the time by which the observer's apparent instant of conjunction differs from the instant of the new-moon, is given to be $= \frac{4 \times \sin (\text{hour angle of the sun})}{R}$ ghatikas (1 ghatika $= \frac{1}{60}$ th of a day, the horizontal parallax being supposed to be $= \frac{1}{16}$ the daily motion of the planet). This is also a very rough rule. The correct rule worked out by Bhaskara being

$$\text{Parallax} = \frac{4R \sin (\text{Sun—nonagesimal}) \times R \sin (\text{alt. of nonagesimal})}{R \times R}.$$

The sum of the semi-diameters of the moon and the sun is assumed to be $35'$. Hence the semi-diameter of the sun is $18'$.

The above is a fairly complete account of the old Paulisha Siddhanta as given in the Pañcha Siddhantika. It did not even hint at the epicyclic theory and as has been shown above this book could not have been the source from which Aryabhata derived his astronomical elements.

Note.—One more point to be noted in connection with the Paulisha Siddhanta is that the table of sines given in

chapter IV of the Pañcha Siddhantika, was with some hesitation ascribed to this Siddhanta by Dr. Thibaut. For he says that this table "may have been common to the three scientific Siddhantas." He imagined an agreement between this table and that of Ptolemy's chords, which would not stand any critical examination. A table of "sines" calculated by an Indian astronomer should always agree with another table calculated by a Greek, provided both followed the correct methods. This cannot be taken to lead to the conclusion that this table of sines must have been borrowed from the Greek table of chords. Dr. Thibaut would certainly agree to the view that a table of 24 Indian sines for any given radius could be calculated by the methods of chapter IV of the Pañcha Siddhantika. Could it not then be possible that this table of sines was calculated by Varaha himself from the rules which are given by him? The most rational view would be to call it Varahamihira's table of sines. The chapter IV of the Pañcha Siddhantika contains rules of spherical astronomy¹¹ up to which Greek astronomy never developed. Further, the agreement between Varaha's table of sines and Ptolemy's chords is merely fanciful. There is disagreement between them in no less than 8 instances. What was suggested in doubt by Dr. Thibaut is made into a positive assertion by Mr. G. R. Kaye, although he has not been able to give any better reasons. It seems that neither Dr. Thibaut nor his follower in this respect, Mr. Kaye, ever worked out a table of sines by the Indian methods. They would have in that case seen the possibility of Indian astronomers' calculating a table of sines independently of any Greek source. The step from the Greek "Chord" to the Indian functions of "Sine," "Cosine" and "Versed Sine" is a very big one; it would be quite unwarranted to assert that any Greek had

¹¹ Vide my paper "Time by Altitude in the Indian Astronomy"—Bulletin of the Calcutta Mathematical Society, Vol. XVIII, No. 1.

taken it. From what have been written before it will be evident that chapter IV of the *Pañcha Siddhantika* cannot be said to have been influenced by any Greek writings.

8. The Romaka Siddhanta of the *Pan̄cha Siddantika*.

We now pass on to the review of the Romaka Siddhanta to see how far Aryabhata may be held to have been indebted to this Siddhanta which distinctly bears the Greek name. The lunisolar mean motion is stated in the most concise manner by Varaha thus :—"The lunisolar *Yuga* of the Romaka comprises 2850 years; in them there are 1050 *adhimasas* and 16547 omitted lunar days." This is equivalent to the statement that in 2850 years there are 1040953 civil days and 35250 synodic months. The year is thus exactly 365 da. 14' 48" as accepted by Ptolemy. The length of the synodic month = 29 da. 31' 50" 5''' 37^{IV} = 29·5305816 days. According to Ptolemy the length of the synodic month is 29d. 31' 50" 8''' 20^{IV}. The Romaka synodic month agrees more closely with Aryabhata, according to whom its length = 29·530582 days.

The length of the anomalistic month is expressed as $\frac{3031}{110}$ days = 27·554 days. The moon's motion in anomaly per day = 13° 3' 53" 58''' 55^{IV} 51^V 45^{VI}; according to Ptolemy this is 13° 3' 53" 56''' 29^{IV} 38^V 38^{VI}. It is evident here that the anomalistic months of the Vasistha, Paulisha, Romaka and Aryabhata are very nearly in agreement. It is very likely that transmitted Greek astronomy in this particular case was made "more accurate" by the Indian expounders.

The longitude of the sun's apogee is stated to be 75°; according to Ptolemy it is 65° 30'. Here also the hand of the

Indian expounder is evident. The table of sun's equation of the centre is given as follows :—

Degrees of anomaly ...	15°	30°	45°	60°	75°	90°
Equation (Romaka) ...	34' 42"	68' 37"	98' 39"	122' 49"	137° 5"	143' 23"
Ptolemy ...	35'	69'	97' 30"	1 21'	136'	143'

I have quoted above the corresponding equations from Ptolemy to bring out the changes made by the Indian expounder. The moon's equations of the centre are given as follows :—

Anomaly ...	15°	30°	45°	60°	75°	90°
Equation (Romaka) ..	1° 14'	2° 25'	3° 27'	4° 15'	4° 44'	40° 56'.
Equation (Ptolemy) ...	1° 11°	2° 19'	3° 19' 30"	4° 8'	4° 49' 30"	4° 59'

It is evident that the Romaka equations for the moon are not the same as those of Ptolemy.

Again the revolutions of the moon's nodes are stated to be 24 in 163111 days. Hence one revolution takes place in 6796 days 7 hours ; according to Ptolemy as quoted by Dr. Thibaut this period=6796 da. 14 hrs. According to Aryabhata it is=6794·749511 days.

The rule for parallax in longitude is the same as in the Paulisha Siddhanta. The parallax in latitude is given to be

$$= \frac{\text{Moon's daily motion}}{15} \times \frac{R \sin (\text{Zenith distance of the nonagesimal})}{120}.$$

Evidently the horizontal parallax of the moon as taken at $\frac{1}{15}$ of the daily motion. The greatest latitude of the moon is taken in this Siddhanta also is 270', which is the same as in all the Indian *Siddhantas* ; according to Ptolemy this is about 5° or 300'. The mean semi-diameters of the sun and the moon are given to be 15' and 17' respectively.

This practically finishes all that is given as the summary of the Romaka Siddhanta in the Pañcha Sindhantika. It has perhaps been amply proved that Aryabhata cannot be held to have derived his astronomical elements from this Romaka Siddhanta. It did not treat of planets: even in lunisolar astronomy it does not state the dimensions of the epicycles. On comparison with Ptolemy's tables for the sun and the moon, the Romaka equations of the centre appear to be taken with very slight changes from the Syntaxis. Further this Siddhanta is silent about all equations in spherical astronomy.

9. The Surya Siddhanta and the Epicyclic Theory.

We next turn to take up the Surya Siddhanta which also must be considered as to have existed before the time of Varahamihira at least, and it would not be unreasonable to suppose that it did exist before the time of Aryabhata. The question now is what was its form? Did it exist in the form in which Varaha presents it to us? I am inclined to the view that it did not exist in that form, it did not contain the epicyclic astronomy in it. Varaha speaks of it as being "more accurate" than the Paulisha and Romaka Siddhantas. As a writer of a practical treatise on astronomy he must give to the world something which could be safely relied on by the subsequent astronomers as producing agreement between the calculated and observed places of planets. He was not a historian of Indian astronomy, but a practical astronomer. It was necessary for him to present one *Siddhanta* or *Karana* which would be more accurate than all others. He most probably borrowed the whole epicyclic theory from a previous or a senior writer whose reputation as an astronomer was unquestioned. Even in the Surya Siddhanta in the modern form there is ample evidence to prove that it had no epicyclic theory in it. Let us study the modern work and see how far this hypothesis is justifiable.

Chapter II of the modern book starts with the following planetary theory :—

“Forms of time of invisible shape, stationed in the zodiac called *Sighrochcha*, *Mandochcha* and *Pāta*, are the agents producing motions of planets. The planets being attached to them by means of strings made of air, are drawn eastward or westward towards them with their left or right hand to which they may get nearer. The wind called *Prabaha*, moreover, drive them towards their *Uchcha* (either *Manda*, or *Sighra*) and thus drawn towards east or west they go by a changing motion. When this agent called *Uchcha* is situated within the half circle towards the east of the planet it draws it towards the east, and situated within the other half (the western half in relation with the planet), it draws the planet in the same way towards the west. The degrees of the zodiac by which the planets attracted by the *Uchchas* move towards the east are to be applied positively while in the westward attraction, the same are to be applied negatively to their mean places.”—Surya Siddhanta, II, 1—5.

The above represents a system of astronomy which is prior to the epicyclic theory. The *Uchcha* is of two classes, the first the *Mandochcha*, in the cases of the sun and the moon, is their apogee, where their angular motion is slowest, and in the case of other planets also the *Mandochcha* is the apse of their orbits. The other type of *Uchcha* is the *Sighrochcha*, which in the case of the superior planets, coincides with the sun, and in the case of an inferior planet is an imaginary point moving round the earth with the same angular velocity as the actual angular velocity of the planet round the sun. Its direction from the earth is always parallel to the line joining the sun and the inferior planet. The *Pātas* are the nodes of an orbit.

Let us now try to understand the influence of *Mandochcha* on the “planets,” and the sun and the moon. This god of the *Uchcha* is seated at his place in the zodiac and always

drags a planet from its mean place towards himself by means of strings made of air either by the right hand or by the left to whichever its mean place comes nearer. This is equivalent to the statement that from apogee to perigee, the apparent planet is behind the mean planet or that the equation of the centre is negative; and that from perigee to apogee, the apparent planet is ahead of the mean planet or that the equation of the centre is positive. It represents a system of astronomy which knew that there was a difference between the mean place and the apparent place of a planet, knew of its character whether positive or negative, and that it varied as the distance of the mean planet from the apogee and the perigee. Most probably it had separate tables of equations for the sun and the moon which are now replaced by something else, in fact by an epicyclic theory.

In the case of other planets these *Mandochchas* were most probably not very well recognised. Only the influence of the *Sighrochcha* was properly recognised. The mean motion of an inferior planet round the earth being the same as that of the sun, the mean position of an inferior planet coincides with the sun, the eastward and westward elongation is produced by the attraction of this *Sighrochcha*, the direction of whose station on the zodiac as seen from the earth is always parallel to the line joining the sun and the inferior planet. It is evident that this elongation is always towards the direction of the *Sighra* from the earth. In considering the case of a superior planet it is easily seen that the mean planet as seen from the earth is deflected as it were towards the sun, thus giving the apparent planet. This so-called attraction of the *Sighra* god is due to the reflection of the earth's orbit on the planet's orbit. The planet looks deflected from its mean position in a line parallel to the line joining the earth and the sun, the deflection being always towards the sun, which is spoken of as the attraction of the *Sighrochcha*.

These *Sighra* deflections which depended on the angular distance of the mean planet from the sun were most probably given in separate tables for the different planets. The differences which are observable at the conjunctions and oppositions were probably conceived as the attractions of the *Mandochcha* of the respective planet for which also separate tables were probably given.

Thus we infer that from a great mass of observation records partial generalisations were most probably given in the original *Surya Siddhanta*. These had not yet been systematized into a consistent theory.

We next consider the action of the *Pātas*. The text next says :—

“In this way the *Pāta* (or the node) by its own force moreover throws a planet either to the north or to the south of the ecliptic thus producing the latitude of the moon and the other planets. The node which is within a half circle west of the planet throws a planet northward, when situated within a half circle east of the planet throws it southward. When the nodes of Venus and Mercury are situated in the same way from the *Sighrochcha*, they are thrown north or south in the same way.”

It is evident that only the ascending node in each case is meant. It seems a mystery how the latitude of an inferior planet could be recognised as depending on the arc between the *Sighrochcha* and the node. Perhaps the author of this *Siddhanta* recognised that these planets moved round the sun, as was also done by Aryabhata and Brahmagupta.

Then the text explains the reasons for the different amounts of equations for the different planets, thus :—

“The sun is certainly attracted very little on account of his great mass, the moon very much owing to her smaller body. The planets Mars and others being of much smaller bodies are attracted by the gods of the *Sighra* and the

Mandochcha, very far away and with great velocity. Thus their equations both positive and negative are very large amounts in virtue of their (irregular) motions. Being attracted by those gods in this way, they proceed in the heavens by being struck by the wind (*Pravaha*)."

No comment is necessary for the hasty generalisations and the fanciful reasons for the magnitude of the various equations of the centre for the different planets. The wind *Pravaha* is brought in to explain the mean motions of the planets.

Then follows the enumeration of the eight-fold motions of the planets:—

"*Vakra*, *Anuvakra*, *Kutila*, *Manda*, *Mandatarā*, *Sama*, *Sighra* and *Sighratarā* are the eight-fold motions of planets. Of these the *Sighratarā*, *Sighra*, *Manda*, *Mandatarā* and *Sama* are the direct motions whereas the three motions spoken of above as adjacent to *Anuvakra*, i.e., *Vakra*, *Anuvakra*, and *Kutila* are the retrograde motions. I now proceed to explain with intense attention how day by day, by virtue of these motions the calculated places of planets attain agreement with the observed places."

After these introductory remarks naturally one should expect that the author would give us the tables of equations for the sun and the moon and in the case of the five other planets he should give us the stages of these eight-fold motions that he has promised us. The hand of the interpolator now comes in and we are given instead a table of *sines* and how to use it for finding the sine and cosine of any given arc and the converse process; the method of finding the sun's declination; how to find the anomalies of apsis and of *Sighra*; the dimensions of the epicycles of the planets; the methods of calculating the equations of apsis and of *Sighra* and how to apply them; the methods of calculating the instantaneous daily motions of planets. Then suddenly the older planetary

theory is allowed to reappear in its true form that "The planet being situated far from its *Sighra*, has its body *dragged by slackened strings toward the right or the left hand*; and then has a retrograde motion." II, 82.

Here is a recognition of the fact that in the case of a superior planet, the retrograde motion takes place near about opposition and in the case of an inferior planet near about its inferior conjunction. How this stanza in all its vagueness could be permitted to stand as it was seems a mystery. In the very preceding stanza is described the reason for retrograde motion under the epicyclic theory.

After this the epicyclic theory is followed all through the entire work. It is perhaps now clear to all appearance that even in the *Surya Siddhanta* as we have it, the epicyclic theory is an interpolation. We have seen above that the *Vasistha Siddhanta* of the *Pañcha Siddhantika* had nothing of the epicyclic theory in it. ¹²The text of the *Pañcha Siddhantika* on the motion of the planets Mercury, Venus, Mars, Jupiter and Saturn, describes some of the stages of the eight-fold motions of the planets. This furnishes another reason in support of the theory now propounded. The natural steps for the development of a science are (i) observation, (ii) classification, (iii) theory. The old *Surya Siddhanta* most probably passed through the stages of observation and partial classification only; it could not build a rational theory. The bringing in of the *Deus ex Machina*, the gods of *Manda*, *Sighra*, *Pāta*, did not advance the theory—it was a halt in the progress of the science.

The question as to whether the lunisolar mean motions treated of in the modern book are really the ones that belonged to the old *Surya Siddhanta* is a matter for speculation. Pandit Sudhakara on page 44 of his commentary, calculates the *Kshepa* quantities of the *Surya Siddhanta* of the *Pañcha*

¹² The stages of the planets are called *Anu Vakri*, *Vakri*, and *Anugati*. See P. *Siddhantika*, XVIII.

Siddhantika, required for the calculations of the mean places of the sun, the moon and the moon's apogee at midday of the 1st day of 427 *Saka* year elapsed. He evidently uses the elements of the Siddhanta as summarised by Varahamihira, although he professes to follow the modern book. He indeed used the modern book as far as the calculations of the number of years elapsed since "the creation" is concerned; in the succeeding steps he undoubtedly uses Varaha's *Surya Siddhanta*. The same *Kshepa* quantities however can be explained from Aryabhata's system of calculation from the years of Kaliyuga elapsed and also much more easily. Hence a hoary antiquity even in respect of lunisolar mean motions cannot be ascribed to the modern *Surya Siddhanta* nor for the matter of that to the *Surya Siddhanta* of Varaha.

As an epicyclic theory is incompatible in the modern book it may be presumed that the original Siddhanta, the name of which Varaha used had no epicyclic theory in it. Further the lunisolar mean motions given in Varaha's *Surya Siddhanta* are taken from the now lost work of Aryabhata. Thus the *Surya Siddhanta* which was most probably made "more accurate" by Varahamihira, cannot be taken to represent an astronomical system existing in India prior to the time of Aryabhata. I now proceed to describe the astronomical systems of Aryabhata.

10. Aryabhata's Astronomical Systems.

As has been stated above Aryabhata was the author of two systems of astronomy. One system is given in his *Aryabhatiyam* in the section *Dasagitika* in which the astronomical day is taken to begin at sunrise at Lanka. The calculations start from a Wednesday from which $459\frac{3}{4}$ Mahayugas or 725447570625 days were supposed to have elapsed till the beginning of the Kaliyuga. Then from the beginning of the Kaliyuga, the number of years elapsed were supposed to be 3,600 years when Aryabhata attained the age of 23 years.

The days elapsed in these 3,600 years come out to be $1314931\frac{1}{4}$ days. Hence the total days till 3,600 years of Kali elapsed or 421 of the *Saka* years elapsed become $72545885556\frac{1}{4}$ days. The places of planets may thence be easily calculated by means of the astronomical elements of the *Dasagitika*. From his own statement at the end of the section *Gola* we are informed that his work is the same as the *Shvayambhuva Siddhanta* of old. This statement seems to be made by the author in the characteristic Indian way to give to his work the sanctity of a revelation in the country. It may be stated with definiteness that there was no scientific *Siddhanta* with an epicyclic theory bearing the name of *Brahma Siddhanta* even up to the time of Bhattotpala (838 Saka year), other than the *Brahmasphuta Siddhanta* of Brahmagupta. The *Paitamaha Siddhanta* of the Pañcha Siddhantika is *Jyotisha Vedanga* in another name. There is absolutely no possibility of Aryabhata's building up his astronomy on it. The now known *Sakalya Samhita*, the *Paitamaha Siddhanta* of the Vishnu-dharmottarapurana, must have been composed at least after the time of Bhattotpala, who while he quotes profusely from Brahmagupta when he means to quote from the *Brahma Siddhanta*, never mentions these Neo-Brahma Siddhantas of which the former is mainly an exact copy of the modern *Surya Siddhanta* and the latter a follower in all important points of Brahmagupta. It is thus clear that there was no scientific *Brahma Siddhanta* before the time of Aryabhata, and he cannot be held to have derived his astronomy from such a source. So much about the system of astronomy as given in the *Aryabhatiyam*. To this system belong the ¹³ *Mahabhas-kariyam* and the *Laghubhaskariyam* written by one Bhaskara, probably a direct pupil of Aryabhata. This Bhaskara is referred to by Prithudaka, the commentator of the *Brahma-*

¹³ Copies of these two books have very recently been obtained by Dr. B. B. Dutta of the Calcutta University College of Science from the Government Manuscript Library, Madras.

sphuta Siddhanta. The other book belonging to this system is the *Sishyadhibridhida* of Lalla who wrote a commentary on the *Khandakhadyaka* of Brahmagupta. (Time of this Lalla has been a matter of some discussion. Sankara Balkrishna Dikshit's opinion is that Lalla lived about 570 of the Saka era. Pandit Sudhakara would make him a direct pupil of Aryabhata and state the time to be 420 of the Saka year. This is no longer tenable now since he was a commentator of one of Brahmagupta's works, who lived from 520 of the Saka era. A closer examination of the *Sishyadhibridhida*, would place Lalla's time to be 670 of the Saka era. It is rather out of place to discuss this point here.)

To his other system belongs the *Khandakhadyaka* of Brahmagupta. In this system the beginning of the astronomical day is the midnight at Lanka. The number of days in a Mahayuga is taken at 1577917800 while in the first system the same is 1577917500 days. The date from which its calculation starts is the beginning of the present Kaliyuga. The astronomical elements of the two systems are exhibited in a tabular form along with the corresponding elements of Varaha's *Surya Siddhanta* and the later *Paulisha Siddhanta*, as we discern from the quotations from it by Bhattotpala and others.

1. PLANETARY REVOLUTIONS IN A MAHAYUGA OF 4320000 YEARS.

	I Aryabhatiyam.	II Khandakha- dyaka,	Surya Siddhan- ta of Varaha- mihira.	Later Pauli- sha Tantra.	Modern Surya Siddhanta.
Sun ...	4320000	4320000	4320000	4320000	4320000
Moon ...	57753336	57753336	57753336	57753336	57753336
Mars ...	2296824	2296824	2296824	2296824	2296832
Jupiter ...	364224	364220	364220	364220	364220
Saturn ...	146564	146564	146564	146564	146568
Moon's apogee	488219	488219	488219	Cannot be traced.	488203
Venus ...	7022388	7022388	7022388	7023388	7022376
Mercury ...	17937020	179 3700	17937000	17937000	17937060
Moon's nodes	232226	232226	232226	Cannot be traced.	232238

2. LONGITUDES OF THE APOGEES OF THE ORBITS OF PLANETS.

	I Aryabhatiyam.	II Khandakha- dyaka.	S. Sidhanta of Varaha- mihira.	Later Pauli- sha Tantra.	Modern Surya Siddhanta.
Sun ...	78°	80°	80°	Cannot be traced.	77°17'
Mercury ...	210°	220°	220°	...	Have to be calculated from data.
Venus ...	90°	80°	80°	...	...
Mars ...	118°	110°	110°	...	...
Jupiter ...	180°	160°	160°	...	...
Saturn ...	236°	240°	240°	...	...

3. DIMENSIONS OF THE EPICYCLES OF APSIS.

Sun ...	13°30'	14°	14°	Cannot be traced.	13° $\frac{2}{3}$ to 14°
Moon ...	31°30'	31°	31°	...	31° $\frac{2}{3}$ to 32°
Mercury ...	22° $\frac{1}{2}$ to 36°	28°	28°	28°	28° to 30°
Venus ...	9° to 18°	14°	14°	14°	11° to 12°
Mars ...	63° to 31°	70°	70°	70°	72° to 75°
Jupiter ...	31° $\frac{1}{2}$ to 36°	32°	32°	32°	32° to 33°
Saturn ...	40° $\frac{1}{2}$ to 58°	60°	60°	60°	48° to 49°

4. DIMENSIONS OF *Sighra* EPICYCLES (*i.e.*, OF CONJUNCTION).

Saturn ...	40° $\frac{1}{2}$ to 36°	40°	40°	39° 30'	39° to 40°
Jupiter ...	67° $\frac{1}{2}$ to 72°	72°	72°	72°	70° to 72°
Mars ...	229° $\frac{1}{2}$ to 238° $\frac{1}{2}$	234°	234°	233°	232° to 235°
Venus ...	256° $\frac{1}{2}$ to 265° $\frac{1}{2}$	260°	260°	260°	260° to 265°
Mercury ...	130° $\frac{1}{2}$ to 139°	132°	132°	132°	132° to 133°

5. LONGITUDES OF THE NODES OF THE "STAR PLANETS."

Mars ...	40°	40°	Not given.	Cannot be traced.	Have to be calculated from the given data.
Mercury ...	20°	20°	...	...	...
Jupiter ...	80°	80°	...	...	...
Venus ...	60°	60°	...	...	...
Saturn ...	100°	100°	...	...	...

6. ORBITAL INCLINATIONS, "STAR PLANETS" (GEOCENTRIC).

Mars ...	90'	90'	10'	Cannot be traced.	90
Mercury ...	120'	150'	135'	...	120'
Jupiter ...	60'	60'	101'	...	60'
Venus ...	120'	120'	10'	...	120'
Saturn ...	120'	120'	135'	...	100'

7. NO. OF CIVIL DAYS IN A MAHAYUGA.

1577917500	1577917800	1577917800	1577917800	1577917828
------------	------------	------------	------------	------------

8. BEGINNING OF THE ASTRONOMICAL DAY.

Sunrise at Lanka	Midnight at Lanka	Midnight at Lanka	Midnight at Lanka	Midnight at Lanka
------------------	-------------------	-------------------	-------------------	-------------------

It will be seen from the above figures that between the two systems of Aryabhata's astronomy, there is agreement in 16 of the elements, between the second system of Aryabhata and the Surya Siddhanta of Varaha, there is agreement in 29 elements and between this second system and the neo-Paulisha astronomy agreement subsists in 17 elements of a total of 19 of the latter's elements which I have been able to collect from Bhattotpala and Amraj's quotations. The most important elements and the essentials of the epicyclic theory in the Surya Siddhanta of Varaha and the neo-Paulisha astronomy are almost exactly the same as those of Khanda-khadyaka which represents the second astronomical system of Aryabhata. The conclusion is now inevitable that the *Surya Siddhanta* as summarised in the *Pañcha Siddhantika* was made "more accurate" by Varahamihira by borrowing the mean motions as well as the epicyclic elements from Aryabhata.

The same remarks apply to the ¹⁴*neo-Paulisha Siddhanta* from which Bhattotpala makes copious quotations. I must state here in justice to Dr. Thibaut and Sankar Balkrishna Dikshit that both of them had noticed some of the points of similarity between *Khandakhadyaka* and the *Surya Siddhanta* of *Varaha*, but perhaps not to the extent to which it has been exhibited above. For as Dr. Thibaut writes, "The statement which Brahmagupta in his *Khandakhadyakarana* makes about the places of the apogees and the dimensions of the epicycles (of apsis only) agree with those made in the sixteenth chapter of the *Pañcha Siddhantika*."—Introduction to the *P. Siddhantika*, page X.

11. Aryabhata's unquestioned originality.

All doubts as to the originality of Aryabhata in constructing a rational system of epicyclic theory have, I trust, been removed. I have shown above that none of the *Siddhantas*, the *Vasistha*, the *Paulisha* and the *Romaka*, can be held to have been the basis of Aryabhata's systems. The *Surya Siddhanta* as it existed before Aryabhata was an unsystematized mass of information. One source for the construction of Aryabhata's astronomy may have been this work. The second alternative is that he used another mass of observation records by the previous Indian astronomers. Besides he himself was an observer and has given us a description of the manner in which he found the mean motions of planets and his statement is unique in the whole of Indian astronomical

¹⁴ *The neo-Paulisha Siddhanta.*

Dr. Thibaut's remarks about it

'We are led to the conclusion that the *Paulisha Siddhanta* also has in the course of time undergone recasts, and that form in which it was known to Bhattotpala widely differed from its original form, so widely indeed, that there is some reason for wondering that the latter could go by the same name as the earlier one.'

Yet Mr. Kaye would hold up the *Siddhanta* as the same as that summarised by Varahamihira in his *Pañcha Siddhantika*. It is impossible to see the fairness of this step. *Vide* his *Hindu Astronomy*, pp. 59-60.

literature. If he had constructed his astronomy from the Surya Siddhanta as it then existed, he would have admitted it, thus giving his work the sanctity of a revelation. It would not have been necessary to use the name of the ¹⁵*Shvayambhuva Siddhanta*.

One more reason for inferring the originality of Aryabhata lies in this :—That ¹⁶ when Srishena and Vishnuchandra wanted to recast the *Romaka* and the *Vasistha Siddhantas* in the epicyclic form they had to take it from Aryabhata's system—as we know from Brahmagupta's statement in Brahmasphuta Siddhanta, XI, 48-50. It is evident they could not get any other epicyclic theory than what could be had from Aryabhata, just as was done by the author of the neo-Paulisha Siddhanta. And we have already shown that none of the Siddhantas of Vasistha and Paulisha had even any hint of the epicyclic theory in them.

In order to finally establish the independence of Aryabhata's system from the Greek astronomy, it would perhaps be best to compare their astronomical elements. This is done in the next page.

¹⁵ आर्यभटीयं नाम्ना पूर्व स्वयम्भुव सदा सदयत् ।

Gola., 50.

¹⁶ लाटात् सूर्यशशाङ्कौ मध्याविन्दूच्चन्द्रपातौ च ।

कुजबुधश्रीभ्रमहस्यतिसितश्रीभ्रमनैश्वरान् मध्यन् ॥४८॥

युगयातवर्ष भगणान् वासिष्ठाद् विजयनन्दिक्ततपादात् ।

मन्दोच्चपरिधिपातस्यष्टीकरणायआर्यभटात् ॥४९॥

श्रीविश्वेन गृहीत्वा रक्षोच्चयरोमकः कृतः कथा ।

एतानेव गृहीत्वा वासिष्ठो विष्णुचन्द्रेन ॥५०॥

Brahmasphuta Siddhanta, XI, 48-50.

	Aryabhata's 1st system.	Aryabhata's 2nd system.	Ptolemy's system.	Vasistha System.	Paulisha System.
	Day.	Day.	Day.	Day.	Day.
Length of the year	365·2586005	365·25875	365° 14' 48"	...	365·2583
Synodic month	29·530582	29·5305874	29° 31' 0" 8''' 20''''	...	29·530558
Synodic Per. of Saturn	378·0859464	378·0860184	378·0929824	378·1	378·11
..... Jupiter	398·8894982	398·8896756	398·8864102	398·8	397·968
..... Mars	779·9210696	779·9212022	779·94279·9	779·9275	779·9787
..... Venus	583·897458	583·897569	584·000000	583·90	583·9061
..... Mercury	115·8761242	115·8785199	115·8786204	115·87916	115·875
Period of Moon's apogee	3231·987079	3231·987844	...	3232·873219	3232·873219
Period of Moon's nodes	6794·749511	6794·750834	6796° 14 hours.	...	6794·6854
Dimensions of the Epicycles of Apsis.					
Sun ...	13° 30'	14°	15°	...	15° 8'
Moon ...	31° 30'	31°	31° 36'	...	...
Saturn ...	40°½ to 58°½	60°	42° 48'	...	...
Jupiter ...	31°½ to 36°½	32°	32° 18'	...	...
Mars ...	63° to 81°	70°	78° 42'	...	...
Venus ...	18° to 9°	14°	15°	...	...
Mercury ...	22°½ to 36°	28°	54° (?)	...	...
Dimensions of the Epicycles of Sighra (Conjunction).					
Saturn ...	36°½ to 40°	40°	39°	39°	36° 51'
Jupiter ...	67°½ to 72°	72°	69°	68° 40'	76° 18'
Mars ...	229°½ to 256°½	234°	237°	...	249° 15'
Mercury ...	130°½ to 139°	132°	135°	...	139° 20'
Venus ...	265°½ to 256°½	260°	259°	255°½	265° 45'

In the sexagesimal units, the length of the synodic month, according to Aryabhata's first system is $29d\ 31' 50'' 5''' 42^{IV}.72$.

It is almost needless to repeat that most of the elements of the *Vasistha* and the *Paulisha* systems have been worked out from the data given in the *Pañcha Siddhantika*. The elements from Ptolemy have been obtained from Karl Manitius's edition of the *Syntaxis*.

It will now perhaps be evident that Aryabhata's system is quite different from Ptolemy's; the former cannot be regarded as deduced from the latter. Whatever similarity may be imagined in regard to the length of the synodic periods of planets need not lead us to consider that Aryabhata's periods are taken from any Greek source; firstly, it was not Ptolemy who first determined them, the Babylonians had determined them long before the time of Ptolemy; secondly, a fresh determination of them in India is not an impossibility. Further, the small discrepancies in the synodic periods are not negligible in mathematical astronomy. Again Dr. Thibaut's contention that the separation of the two distinct inequalities in the motion of the planets Mercury, Venus, Mars, Jupiter and Saturn as found in the Indian systems of Astronomy, must have been derived from "Ptolemy¹⁷ alone directly or indirectly" is not at all tenable. Though the date of the *Aryabhatiyam* is undoubtedly 421 of the Saka era (or 49) A.D.) and later than that of Ptolemy, it is amusing to see a professor of Philosophy with specialisation in Indian Astronomy, led away by the fallacy of *post hoc ergo propter hoc*. It appears necessary to discuss the method of the ancients for the separation of the twofold planetary inequalities and to examine if this was really a very difficult task with them.

¹⁷ Introduction to the *Pañcha Siddhantika*, p. Lii.

12. Separation of the Inequalities of Apsis and of Conjunction of a planet by the method of the Ancients.

Modern Astronomy recognises the following six elements of a planet, *viz.*,

1. The semi axis of the ellipse.
2. The eccentricity.
3. The heliocentric longitude of the node.
4. The inclination.
5. The longitude of the apse.
6. The epoch.

“To determine these elements three complete observation of right ascension and declination will be sufficient; for from each observation can be inferred the corresponding geocentric latitude and longitude, and these will furnish two equations connecting the elements of the orbit. But although theoretically sufficient, it will be found practically more accurate and more simple to make observations at particular times, when the planet occupies selected positions specially favourable for finding each element in turn.”

—Godfray's Astronomy, pp. 275-76.

We now proceed to illustrate the method used by the ancients by considering the case of the planet Mars. It is evident to all students of astronomy that the annual parallax or the *Sighra* equation of a superior planet vanishes at conjunctions and oppositions; the only inequality by which the planet is then affected is the equation of apsis. We learn from the French nautical almanacs for the years 1925-1928, that the following phenomena of Mars happened or would happen at the following dates and times:—

1	2	3	4	5	6	7	...
Date.	Time G. M. T.	Mars's Geo. long.	Event.	Days elapsed since event (1)	Mean Mars + E_1 .	Equation of apsis - E_1 .	..
Sep. 13, 1925	12 hours	170°9'50"	Conjunction (1)	0	170°9'50"	0°0'0"	(1)
Nov. 4, 1926	10 hours	41°14'15"	Opposition (2)	416·92	28°8'28"	13°5'47"	(2)
Oct. 21, 1927	2 hours	206°41'20"	Conjunction (3)	767·57	212°23'45"	-5°42'25"	(3)
Dec. 21, 1928	14 hours	89°34'2"	Opposition (4)	1195·08	76°25'31"	13°8'31"	(4)

By event (1) has been denoted the conjunction on September 13, 1925. Mars's geocentric longitude at 12 hours of September 13, 1925, *viz.*, 170°9'50" = Mars's mean longitude at that instant + Mars's equation of the centre; this latter quantity has been denoted by E_1 . If θ represent the mean anomaly of Mars at the instant of conjunction (1), *measured from the aphelion*, then we deduce from the second row the equation,

$$13^{\circ}5'47'' + E_1 = -K \sin \theta + K' \sin 2\theta \quad \dots (A)$$

where,

$$\frac{K}{2e} = \frac{K'}{\frac{5}{4}e^2} = 3437' \cdot 746, \text{ and } e = \text{the eccentricity of the orbit.}$$

Similarly from the rows (3) and (4) we get the equations:—

$$-5^{\circ}42'25'' + E_1 = -K \sin (\theta + 184^{\circ}15'17'') + K' \sin 2(\theta + 184^{\circ}15'17'') \quad \dots (B).$$

and

$$13^{\circ}8'31'' + E_1 = -K \sin (\theta + 48^{\circ}17'3'') + K' \sin 2(\theta + 48^{\circ}17'3''). \quad \dots (C)$$

In calculating the increase in the mean longitude of Mars, the sidereal period was taken at 686·9797 days. The

column (7) is obtained by subtracting the column (6) from the column (3). It shows that if a series of results as are arrived at in this column, is obtained during a period of about fifty years, the equations of apsis for different values of the mean anomaly would be easily deduced; the longitude of the aphelion and the mean longitude of Mars would be readily obtained. If however an astronomer should confine himself to a set of three equations like (A), (B) and (C) obtained above, different approximate solutions would be obtained by different astronomers in different ages according to the knowledge of trigonometry at their command. If we take the value of e , the eccentricity of Mars's orbit as given by Newcomb and Hill, *viz.*, $e = \cdot 093309$, we find that to a very fair degree of approximation, the equations (A), (B) and (C) are satisfied by the following values of the constants:—

$$K = 10^{\circ}41'33''$$

$$K' = 0^{\circ}37'25''$$

$$\theta = 239^{\circ}13'13''$$

$$E_1 = -3^{\circ}21'42''$$

The longitude of the aphelion $= 152^{\circ}16'57''$

„ „ of the perihelion $= 332^{\circ}16'57''$

The mean longitude of Mars at 12 noon on Sep. 13, 1928 $= 173^{\circ}31'32''$. According to Newcomb and Hill (quoted by Ball in his *Spherical Astronomy*, Table I) the longitude of the perihelion of Mars is $334^{\circ}13'7''$ for the epoch 1900; and there are reasons for this and other differences in the values of the constants as stated above and as used in the calculation of Mars's longitude for the nautical almanacs of different countries. I trust this sufficiently illustrates the method of the ancients. So far as the Indian system of Astronomy is concerned, the second term of the expression for the equation of the centre is not exactly of that form. It is really equal to $K' \sin^2 \theta$,

Ptolemy follows the above method with difference in the following points :—

1. He uses only the oppositions of superior planets. The right instants of oppositions are more accurately interpolated than those of conjunctions.

2. He takes the oppositions of the superior planet not with respect to the true sun but with respect to the mean sun.

3. He uses a geometrical method for the solution of his equations.

The Indian astronomers also consider that the *Sighra* equation or the annual parallax of a superior planet vanishes at conjunctions and oppositions with the mean sun ; but in the conception of the orbit of a superior planet¹⁸ they were not dogmatic in their assertion. Their method of determination of the constants was perhaps not geometrical, but trigonometrical and probably also graphical.

The differences noted in column (7) were most probably first tabulated by the Babylonians. The following are the reasons which justify this hypothesis :—

(I) The Babylonian astronomers were very patient and tenacious observers of the heavens. It was they who first found that Venus, Mercury, Saturn, Mars and Jupiter return in almost exactly 8, 46, 59, 79 and 83 years respectively, to the same point in the sky. These are apparently certain multiples of the sidereal and synodic periods of these planets. Year after year they published their ephemerides in which the conjunctions and oppositions of planets were predicted. They must therefore in the courses of ages, have tabulated such differences as are noted in column (7) given above.

(II) The *Surya Siddhanta* in the oldest form, I mean in the form in which it existed before the time of Aryabhata and

¹⁸ Cf. खलान्तरत्वात् सदुक्तार्थोद्धारणः कृतोनेति वदन्ति केचित् ।

यतो विचित्राफलवासनाऽत्र ॥ Bhaskara.

Varahamihira, was presumably a form of Babylonian astronomy. Its author *Maya* was an *Ashura* or Assyrian—a sun worshipper also. In the time of the *Mahabharata* also *Maya*, the *Ashura*, was known as a great architect. These two *Mayas*, may be the same or different persons. We cannot from this consideration come to any conclusion when this *Surya Siddhanta* in the oldest form was transmitted to India from Babylonia. We may rely on the tradition, only in this respect that this *Siddhanta* was really a form of the Babylonian astronomy. It has been shown before that this *Surya Siddhanta* imagined the idea of the gods of *Manda* and *Sighra*, to explain the “two-fold” planetary inequalities, and we get sufficient hints that separate tables for the *Manda* and *Sighra* equations were given in it. Thus from both reasons it seems clear that what is claimed as an achievement for Ptolemy in ancient times by Dr. Thibaut is really an achievement that should be ascribed to the Babylonians. We have also on record that serious attempts were made in India to determine the motions of superior planets by the astronomer ¹⁹Pradyumna, who was prior to Aryabhata. Attempts of the same nature were made by the Indian astronomer Vijayanandin, to determine the motions of Mercury. It seems that different planets were observed by different astronomers in India, and the results were finally systematized by Aryabhata.

When the astronomical elements of a planet as are required for the equation of apsis, are known, its heliocentric longitudes can be readily calculated. The geocentric longitudes are found by observation and the elongations from the sun and the annual parallax or the *Sighra* equation are known. The *Sighra* periphery or the distance between the sun and the earth, when the distance of the superior planet from the sun be taken at 360—can be readily calculated. This is now illustrated :—

¹⁹ प्रद्युम्नभूषितनये जीवे सौरिष । P. Siddhantika, XVIII, 62.

Also अङ्गचिति विजयनन्दि प्रद्युम्नादीनि पादकरणाणि । B. Siddhanta, XI, 58.

Calculation of the Sighra Periphery of Mars.

1	2	3	4	5	6	7
Date.	Heliocentric Long. of Mars.	Geocentric Long. of Mars.	Sun's Longitude.	Annual parallax or Sighra Eqn.	Elongation of Mars.	Sighra Periphery.
13-9-25	169°56'33"	169°50'35"	169°40'24"	...	...	...
17-11-25	199°5'32"	212°17'1"	234°7'25"	13°8'29"	21°50'24"	220.012
20-12-25	214°42'57"	234°31'29"	267°35'37"	19°48'32"	33°4'8"	223.585
21-1-26	230°31'41"	256°34'58"	300°12'44"	26°3'17"	43°37'46"	229.219
23-2-26	247°43'20"	279°49'9"	333°38'5"	32°5'49"	53°48'56"	236.999
27-3-26	265°21'34"	302°45'0"	5°34'49"	37°23'28"	62°49'49"	245.722
29-4-26	284°33'34"	326°36'18"	37°55'49"	42°2'45"	71°19'30"	254.500
31-5-26	304°5'44"	349°31'3"	68°47'32"	45°26'19"	79°16'29"	261.063
3-7-26	324°45'54"	12°4'46"	100°18'39"	47°18'53"	88°13'53"	264.758
4-8-26	345°4'8"	31°26'20"	130°51'33"	46°22'15"	99°25'13"	264.141
6-9-26	5°46'11"	45°47'33"	162°38'36"	40°1'22"	116°51'3"	259.490
8-10-26	25°13'45"	48°52'25"	193°57'14"	23°38'40"	145°4'49"	252.227
10-11-26	44°23'58"	39°18'25"	226°50'9"	—5°5'33"	187°31'45"	244.143
12-12-26	62°0'49"	34°41'0"	259°12'19"	—27°19'49"	224°31'19"	235.720
14-1-27	79°11'31"	42°21'57"	292°50'1"	—36°49'34"	250°28'4"	228.955
15-2-27	94°59'46"	56°26'56"	325°19'6"	—38°32'50"	268°52'10"	224.371
20-3-27	110°34'0"	73°58'0"	358°23'40"	—36°35'10"	284°24'50"	221.602
21-4-27	125°7'38"	92°18'15"	29°54'13"	—32°49'24"	297°35'58"	220.194
24-5-27	139°46'29"	111°52'40"	61°50'31"	—27°53'48"	309°57'51"	219.816
25-6-27	153°46'56"	131°16'41"	92°27'12"	—22°30'15"	321°10'31"	219.833
28-7-27	168°13'13"	151°40'46"	123°55'59"	—16°32'27"	332°15'13"	220.147
29-8-27	182°22'58"	171°54'24"	154°23'51"	—10°28'34"	342°29'27"	217.568

The longitudes are taken from the French nautical almanacs for the years 1925 to 1927. It will be seen from the above calculation that the *Sighra* periphery of Mars varies from about 220 at the aphelion to about 265 at the perihelion.

That this is the case, is also seen from the following considerations :—

Let a and a' represent the semiaxes major of the orbits of the earth and Mars, e' the eccentricity of the orbit of Mars ;

let the equation of the orbit of Mars be $\frac{r'}{r} = 1 + e' \cos \theta$, where

θ is the true anomaly of Mars from the perihelion point. Let us take the orbit of the earth to be a circle of radius a , with the sun at the centre ; then from the definition of the *Sighra* periphery ; we have

$$\frac{P}{360} = \frac{a}{r} = \frac{a (1 + e' \cos \theta)}{a' (1 - e'^2)},$$

where P denotes the *Sighra* periphery of Mars.

We now take the following values for the constants involved from Ball's Spherical Astronomy :—

$$a = 1.000000$$

$$a' = 1.523688$$

$$e' = .093309$$

$$\therefore P = 238.344 + 22.240 \cos \theta.$$

$$\text{Hence when } \theta = 0^\circ, P = 260.584;$$

$$\text{and when } \theta = 180^\circ, P = 216.104.$$

In this investigation the variation of the distance of the earth from the sun has been ignored, which explains the discrepancy between these values and those obtained from the calculations based on the French nautical almanac. The general expression for the *Sighra* periphery is rather cumbrous and its use in finding the annual parallax of Mars is also cumbrous ; a better plan is undoubtedly to follow the methods of modern

astronomy. The investigation given above shows that the *Sighra* periphery of a superior planet, varies with the true anomaly.

According to Aryabhata and all the Indian Siddhantas, the *Sighra* periphery varies with the mean *Sighra* anomaly. This was of course a mistake. According to Aryabhata, its value varies from 238·5 in odd quadrants to 229·5 in even quadrants of the mean *Sighra* anomaly. According to Brahmagupta it has a mean value of 242·5; while Ptolemy gives it a constant value of 237. Both the Indian and Greek systems are wrong, although Ptolemy's constant value of it agrees more closely with the mean value obtained in the theoretical investigation given above. In calculating the annual parallax, however, both the systems are equally wrong, as both use not the true, but the mean longitude of the sun. In doing this they were perhaps under the impression that the centre of the eccentric circle (their apparent orbit of the sun) was equidistant from all points of the apparent solar orbit. It was this point, they thought, about which the sun moved with a uniform angular velocity. It is now known that no such point exists; the point which approximately satisfies the above condition, *viz.*, about which the sun's angular velocity is almost constant, is the empty focus, while the point from which the distance of the sun remains almost constant is the centre of the apparent orbit.

The ancients separated the equation of apsis of a superior planet by the observed and calculated longitudes of such a planet at the oppositions and conjunctions with the mean sun; such conjunctions or oppositions were referred to the radius vector from the empty focus to the apparent sun. So far as the amount only of the maximum equation of apsis is concerned it was not a bad method; but this would misplace the apse line of the orbit. This is now illustrated. The equations of apsis of superior planets for the mean anomaly of 90° as given by Ptolemy and as deduced from the data of

Aryabhata and Brahmagupta are shown in the following comparative form :—

The Equation of apsis for the mean anomaly of 90° .

Name of Planet.	Acc. to Ptolemy.	Acc. to Aryabhata.	Acc. to Brahmagupta.
Mars ...	$11^\circ 19'$	$11^\circ 27' 36''$	$11^\circ 8' 36''$
Jupiter ...	$5^\circ 14'$	$5^\circ 22' 28''$	$5^\circ 15' 9''$
Saturn ...	$6^\circ 30'$	$7^\circ 52' 44''$	$7^\circ 57' 30''$

The value of e , the eccentricity of the orbit as deduced from these data are,

Planet.	Acc. to Ptolemy.	Acc. to Aryabhata.	Acc. to Brahmagupta.	Acc. to Newcomb and Hill.
Mars ...	·0987493	·1000000	·097222	·093309
Jupiter ...	·0456661	·046875	·0458333	·048254
Saturn ...	·0581732	·06875	·0694444	·056061

It will appear that neither Ptolemy nor the Indian astronomers could get at the accurate values of these constants. The two systems are entirely different. It was a wrong hypothesis which said that Indian astronomy was derived from the work of Ptolemy as there is no agreement in this case between them. If, on the other hand, we compare the longitudes of the so-called apogee (aphelion) of Mars as given by Ptolemy and Aryabhata, we find no agreement between them. According to Ptolemy the longitude of Mars's aphelion point was $16^\circ 40'$ of the sign Cancer or the longitude was $=106^\circ 40'$. Now Aryabhata wrote his book in 499 A.D., hence taking 350 years to have elapsed between the two writers, and taking $1'6''$ of arc to be the rate at which the longitude of the point increased per year, the increase for this period becomes $6^\circ 25'$. At the time of Aryabhata it should have been $113^\circ 5'$, if he came to know of it from any Greek source. Further it seems doubtful if any Greek astrologer or astronomer who came to

India, could allow for the change of longitude of the aphelion point which was generally taken to be a stationary point in reference to the signs of the zodiac. The only increase which they could be aware of was that due to the precession of the equinoxes, which was determined by Ptolemy to have a mean rate of $36''$ per year; and by the greatest stretch of imagination could be raised to about $59''$ per year. There was absolutely no method by which the longitude of the aphelion point of Mars as stated by Ptolemy to be $106^{\circ} 40'$, could be increased to 118° as stated by Aryabhata after 350 years. This means that the longitude of the aphelion point of Mars was freshly determined by him and not deduced from any Greek source. The same conclusion follows if we consider the longitudes of the aphelion points of all the superior planets.

13. Longitudes of the Aphelion Points of Superior Planets.

Planet.	According to Ptolemy. 150 A.D.	According to Aryabhata. 500 A.D.	Difference.	According to New- comb and Hill. 1900 A.D.
Mars ...	$106^{\circ} 40'$	118°	$+11^{\circ} 20'$	$154^{\circ} 13' 7''$
Jupiter ...	$152^{\circ} 9'$	180°	$+27^{\circ} 51'$	$192^{\circ} 36' 20''$
Saturn ...	$224^{\circ} 10'$	286°	$+11^{\circ} 50'$	$270^{\circ} 48' 32''$

All these consideration lead us to reject the idea as suggested by Biot, that the Greek astronomy as transmitted through Greek astrologers and almanac-makers formed the basis of all the Indian Scientific Siddhantas and of Aryabhata as well. These practical calculators or almanac-makers were not astromers and they could not be supposed to have ever made bold to modify or rectify the teachings of Ptolemy. All attempts as are made by Thibaut and his followers to establish a "fundamental dependence" of Indian Astronomy on the Greek Science must now be considered as wrongly directed. An astrologer or an almanac-maker can not be thought to have ever been of the same mental level as of a Ptolemy or a Theon, so as to be able to modify or rectify the

astronomical constants in such a drastic manner. Still less would he be thought competent to reject²⁰ the equation of evection from the lunar theory of Ptolemy, knowing from his teaching that the maximum difference could come to about 2°40' nearly. Another point of disagreement between the Greek and the Indian systems consists in this, *viz.*, that the Indian equation of apsis is a simple harmonic function of the form $A \sin nt$, where nt is the mean anomaly, although A , the amplitude is made to vary according to some law or laws. In the Greek system it is strictly of the form,

$$\sin^{-1} \left(\frac{A \sin nt}{\sqrt{R^2 + A^2 \pm 2AR \cos nt}} \right)$$

14. Conclusion.

All these considerations lead the writer of this thesis altogether to reject and discredit the hypothesis so long so persistently asserted by the European researchers that Indian Astronomy was actually derived from some Greek source. If Indian Astronomy is to be held indebted to any foreign system of astronomy that system of astronomy was the Babylonian astronomy—the fountain-head from which both the systems took their rise. The form in which that system of astronomy was known was the *Surya Siddhanta* with its gods of *Manda* and *Sighra*, as producers of planetary inequalities. These inequalities were no doubt separated by the Babylonians first, who were not only content with finding the multiples of the synodic and sidereal periods of revolution, but also calculated and foretold the conjunctions and oppositions of planets. These were the natural steps which automatically separated these twofold planetary inequalities. There is no difficulty in seeing that the Indian astronomer learnt the method of separating these inequalities from the writings of the Babylonians. We have seen before that the *Vasistha Siddhanta* as

²⁰ Introduction to the *Pañcha Siddhantika*, pp. LI and LII.

summarised in the *Pañcha Siddhantika*, also speaks of the synodic periods of planets and also of their courses; these rules of prediction, coupled with observation, must have furnished the Indian astronomers with these methods. It appears from evidence quoted before that the astronomer *Pradyumna* made a special study of the superior planets, and that the astronomer *Vijayanandin* made a special study of the inferior planets. Both these astronomers flourished before the time of *Aryabhata*. The astronomical treatises of these two writers and other astronomical records furnished new materials at the hands of *Aryabhata*, who set about and determined the astronomical constants anew. What was done by *Hipparchus* among the Greeks, was done in India by astronomers of the type *Vijayanandin* and *Pradyumna*. Their work lay in the verification and correction of the Babylonian astronomy. The Indian epicyclic astronomy, as far as it can be called so, was then constructed by *Aryabhata*, from whom alone all the later Indian astronomers drew their inspiration. Thus the position of *Aryabhata* in India was the same as that of *Ptolemy* in Alexandria. This explains the reason why *Aryabhata* is held in so great esteem by all Indian writers. *Dr. Thibaut*, started with wrong hypotheses in more than one instance, was thus unable to explain the "the great fame which *Aryabhata* no doubt enjoyed." These wrong hypotheses, I think, have been made sufficiently clear. I trust there is now no doubt about the honour which belongs to *Aryabhata*.

One word more is perhaps necessary to explain the existence of a few Greek terms in Indian astronomy. These terms (though not used by *Aryabhata* excepting only in one occasion) in the most convenient forms were probably absent in Indian and Babylonian systems of astronomy, and they were indeed taken from the Greek source. As regards the pseudo-science of astrology, the Babylonians and the Greeks were regarded as masters. Consequently there is no want of Greek terms in Indian astrology.

WOMEN'S DIALECT IN BENGALI

BY

SUKUMAR SEN, M.A.

CHAPTER I

Introductory

Even from the earliest days in the history of mankind, women have a special environment of their own. Men and women have different spheres of occupation. This is true of every country and of every people. Only, the difference may vary in different peoples and also in different periods. This being the case, there must have existed, even in those remote days when man began to speak, at least some difference between the speech of man and that of woman.

In modern days some of the less civilized peoples have preserved sex dialects intact. This is true of some native peoples of the Pacific islands [Jespersen, *Language*, pp. 237-41]. Women of these peoples have sets of nouns, pronouns and verbal forms different from the corresponding ones used by their men. Man and woman speak almost different languages there. But though the languages of modern civilized peoples have no sex dialect proper, yet almost all of them preserve some characteristic idioms which are entirely, or almost entirely, confined to women alone.

The cause of the different sex dialects or idioms lies in different psychologies of man and woman. Woman is concerned with her home and children and she is essentially timid and superstitious. But man has to find food for his family; he has got to be bold and forward. Moreover man comes in greater touch with foreign peoples and alien tongues, while woman has no such opportunities. This accounts for the relative conservativeness of woman's speech.

The following are the chief characteristics of the speech of woman.

A. Woman's speech is, comparatively speaking, more conservative than that of man. In other words, woman's speech retains archaic features when these have long disappeared from the dialect of man. It is also a very noted fact that women avoid neologisms as far as they can.

B. Woman's vocabulary contains a very large number of intensive words and emphatic particles as well as pejorative expletives. There is also a very strong tendency of exaggeration of stress and tone accent to mark emphasis.

C. Euphemism is one of the great characteristics of woman's speech. Women are naturally shy of mentioning some parts of human anatomy and some functions of human physiology. They, therefore, invent innocent euphemistic words and periphrastic expressions to denote those parts or functions. Through this euphemistic principle women have exercised their greatest influence on linguistic development in general.

D. Women are generally superstitious. They shrink instinctively from uttering names of evil spirits and from mentioning inauspicious or evil things. Women of some peoples are forbidden to mention the name of their husbands or their superiors. The speech of modern civilized woman has, of course, lost this peculiarity.

E. Women's vocabulary is much more limited than that of men. Men generally want to avoid what is commonplace and banal and try to replace it by new and fresh expressions. But women are content with their old vocabulary and avoid the coining of fresh words and expressions; "women move preferably in the central field of language."

F. Women are exceedingly fond of pejorative terms and expressions. They are masters in the exchange of smart taunts and saucy ridicule.

In the following pages an attempt has been made to discuss the special idioms of Bengali women, along with a glimpse of the Old and Middle Indo-Aryan state of things.

CHAPTER II

Old Indo-Aryan

Traces of sex dialect in Oldest Indo-Aryan (Vedic) are exceedingly scarce owing, no doubt, to the sacred and religious character of its literature. Only some doubtful instances can be gathered from a few R̥gvedic hymns and verses ascribed to women poets.¹ These hymns contain words, substantives and adjectives, which do not occur anywhere else in the R̥gveda. It is very hazardous to conclude anything from this. Still some instances are adduced below :

avikā * mother, protector * < *avi* + *ka*; i. 126.7.

anudéyī * bride's maid, i.e., the girl who accompanied the bride to her husband's home *; x. 85. 6.

grhāpatnī * mistress of the house *; x. 85. 26.

kurīra * women's head-dress *; x.85.8.

prapharvī * a voluptuous maiden *; *anyām iccha praphar-vyām sām jāyām pātyā sṛja*; x.85.22.

śarāru * corruptor, spoiler, destroyer *; *avīrām iva mām ayām śarārurabhī manyate*; x.86.9.

vivācanī * umpire, arbiter *; *ahām ugrā vivācanī*; x.159.2.

¹ The following hymns and verses are by tradition ascribed to women poets in the R̥gveda :—

i.126.7 (Romāśā Brahnavādini); v.28 (Viśvavārā); viii.91 (Apālā Atreyī); x.10.1, 3, 5-7, 11, 13 (Yamī Vaiivasvatī); x.39, 40 (Ghoṣā); x.85 (Sūryā Sāvitrī); x.86.2, 4, 6, 9, 15-17 (Indrāṇī); x.95.2, 4, 5, 7, 11, 13, 15, 16 (Urvaśī); x.108.2, 4, 6, 8, 10, 18 (Saramā); x.125 (Vāk Ambhrī); x.145 (Indrāṇī); x.159 (Śacī Paulomī). To these should be added the two following secular hymns—vii.55.2-8; ix.112.

ádurmaṅgalī * (the bride) not bringing any misfortune * ;
x.85.43. [The word *maṅgala* does not occur in the Ṛgveda.]

anāthá * protectionlessness * ; *kím bhrātāsad yád anāthám bhāvāti*; x.10.11. [The word *nātha* does not occur in the Ṛgveda.]

talpaśīvarī * (a woman) lying on bed * ; *proṣṭhe-śayā* * (a woman) lying on a bench * ; *vahye-śayā* * (a woman) lying on a couch * ; vii.55.88. [The word *talpa* does not occur elsewhere in the Ṛgveda. In the Atharvaveda it occurs but in one passage which has however been twice repeated, e.g., *nāsyā jāyā talpam ā śaye* (v. 17.12 ; xiv. 2.31, 41). The word *proṣṭha* also does not occur elsewhere in the Ṛgveda.]

pátivatī * (a woman) with her husband living * ; x. 85.21;
cf. classical Sanskrit *pativatnī*.

pitṛśád * (an unmarried woman) living with her parents *. This word has been used pejoratively and occurs only twice in the Ṛgveda, e.g., *pitṛśáde ghóṣāyai* i. 117.7; *anyām iccha pitṛśádam* x. 85.21.

pūnyagandhā * sweet-scented, i.e., chaste woman * ; vii. 55.8.

vidvalā * cunning (woman) * ; x. 159.1.

vīrīṇī * (a woman) having a heroic husband (or son) * ;
x.86.9.

saṁjayā * victorious * ; x. 159.3

subhasáttarā * (a woman) having more beautiful hips * ;
suyāśutarā * more competent for coitus *. Indrāṇī says to Vṛṣā-
kapi :—

ná mát strī subhasáttarā ná suyāśutarā bhuvat |

ná mát práticyavīyasī ná sákthy údyamīyasī |

vīsvasmād índra úttaraḥ || x. 86.6.

[One can very well accept this verse as originating undoubtedly from women on account of its gross indecency.]

batá * weakling * ; *bató batāsi*; x. 10.13.

amājūr « an old maid residing with her parents or parents' people ». This word occurs thrice in the R̥gveda.¹

nyócanī « amiable, lovely » ; x. 85. 6.

The secular and magical hymns of the Atharvaveda furnish some materials for the study of sex dialect in the oldest stage of Old Indo-Aryan. But the difficulty is that for the most part the meanings of words and the import of the verses cannot be fixed with any certainty. A great deal of the vocabulary of these obscure hymns does not occur anywhere in the whole of the vast Vedic and post-Vedic literatures. The following verses are specially rich in such materials :

i. 11 (successful childbirth) ; i. 14 (imprecation of spinsterhood on a woman) ; ii. 36 (to find a husband for a woman) ; vi. 11 (for birth of male children) ; vi. 89 (to win affection) ; vii. 130, 131, 132 (to win a man's love) ; viii. 6 (to guard a pregnant woman against demons) ; the whole of Book xiv (marriage ceremonies) = RV. x. 85.

The following words (occurring in the above hymns) appear to have belonged to woman's vocabulary.

sambhala « wooer » ii. 36.

preṇi « love » vi. 89. 1.

smara « love » (or « love charm » according to Ludwig) vi. 130. 1. [The following is the only passage where the root *smṛ* governs the genitive in the Vedic literature. The woman says—*yathā mama smarād asau nāmusyāhaṃ kadācana* « so that he may think of me and not I of him » vi. 130. 13.]

pativedanau « the spouse-finders, i.e., the two breasts » ; *yau te mātonmamārja jātāyāḥ pativedanau* viii. 6. 1.

avatokā « a woman that miscarries » ; viii. 6. 9.

kamala « lustful » ; viii. 6. 9.

In the hymn for guarding a pregnant woman against demons (viii. 6) the demons have not been named, but have been

¹ *amājūr iva pitrōḥ sácā satī* ii.17.7 ; *amājūro yathā* viii.21.15 ; *amājūras cid bhavatho yuvām bhāgaḥ* x.39.3.

described by means of significant adjectives. For the similar psychology of modern women see below.

The following are some of the characteristic epithets and descriptive adjectives of the unnamed (or "ill-named"—*durñāman*, as mentioned in the hymn) demon or demons.

durñāman « ill-named » ; *palālānupalāla* « the straw and the after straw (?) » ; *āśreṣa* « entwiner » ; *vavrivāśas* « wrap-garmented » ; *ṛkṣagrīva* « bear-necked » ; *pramālin* « the winking one » ; *stambaja* « tuft-born » ; *tuṇḍika* « snouted » ; *arāya* « niggardly » ; *tirīṭin* « tiara-decked, i.e., womanish » ; *āpā-kestha* « stayer in the oven » ;

ye pūrve vadhvo yanti haste śṛṅgāni bibhrataḥ |
āpākesthāḥ prahasinas tambe ye kurvate jyotis
tān ito nāśayāmasi ||

« Those who go before a woman, bearing horns in the hand, stayers in the oven, laughing out, who make light in the tuft, them I disperse from here » [viii. 6. 14].

khalaja « threshing floor-born » ; *śakadhūmaja* « dung-smoke-born » ; *kumbhamuṣka* « pot-testicled » ; *munikeśa* « hermit-haired » ; *pavīnasa* « rim-nosed » ; *nagnaka* « naked ». A great many words in this hymn are of unknown and unknowable meaning.

Euphemism.

Indrāṇī (in the Vṛṣākapi hymn) uses the adjective *romaśá* « hairy » to denote *membre virile*, e.g., *séd-īse yásya romaśám niṣedúṣo vijrmbhate* [RV. x. 86. 16, 17]. To denote the same thing Urvaśī uses the word *vaitasá*, e.g., *dīvā náktam śnathitā vaitaséna* [RV. x. 95. 4]; *trīḥ sma mahnah śnathayo vaitaséna* [RV. x. 95. 5]. In AV. i. 14. 4 the word *bhaga* « portion » has been used for the first time to signify *pudenda mulibre*.

Relation Words.

The following words denoting marriage relations of women are found in Old Indo-Aryan.

devr' 'husband's brother' (also *devara* in Classical Sanskrit). This word occurs twice in the R̥gveda (x. 42. 2 ; x. 85. 46) and once in the Atharvaveda (xiv. 1. 39). The following are its Indo-European cognates : Greek *δανήρ* ; Latin *levir* ; Old Slavic *deveri* ; Lithuanian *dėveris* ; Armenian *tāygr*.

nānāndr 'husband's sister'. It occurs only once in the R̥gveda (x. 85. 46). This word is of Indian origin (see Uhlenbeck, *Etymologisches Wörterbuch der Indogermanischen Sprachen*, for its derivation). The primitive Indo-European word [Greek *γάλως* ; Latin *glōs* ; Russian *zólva*] is lost in Indo-Aryan.

yātr 'wife of husband's brother'. This word does not occur in the R̥gveda, but it is no doubt an inheritance from the primitive Indo-European stock. Cf. Greek (Homeric) *εἰνατέρες* ; Latin *janitrīcēs* ; Old Slavic *jetry* ; Lithuanian *jenter-*.

In the Vedic prose literature the following words—all derivatives from the word *ambā* 'mother'—are found as either female names or terms of address of women :

ambikā, *ambālikā*, *ambālī*, *ambāla*, *ambāḍā* 'little mother' [Vājasaneyi-Saṃhitā xxiii. 18 ; Taittiriya Saṃhitā vii. 4. 19. 1 ; Kāthaka Saṃhitā iv. 7] ; *ambāyavī* 'name of an *Apsaras*' [Kauṣītaki-Upaniṣad].

In addition to the above there are a few more relation words in Classical Sanskrit, which appear to have come from the Middle Indo-Aryan vocabulary [see Chapter III].

Interjections :

The following two interjections occur only in female speech in the R̥gveda.

bata 'oh, alas'. This affectionate expletive occurs only once in the R̥gveda (x. 10. 30), but is quite abundant in Classical Sanskrit.

mamát (with a following *cana* or *cid*) « very soon, at once, as soon as ». It occurs only in two successive verses in the Rgveda where Aditi speaks to Indra [vi. 18. 8, 9].

In Classical Sanskrit traces of sex dialect are almost nil. The following are the only words which were exclusively used by women.

āli, *ālī* « a female friend ». It occurs also in Middle Indo-Aryan.

ululi, *ululu* « women's cry on auspicious occasions ». This onomatopoeitic word is inherited from primitive Indo-European ; cf. Greek *ὀλολύζω* ; Latin *ululare* ; Lithuanian *ulula* « they shout ».

In the dramas women address their husbands as *āryaputra*. But this word was also employed by servants in addressing their royal masters.

CHAPTER III

Middle Indo-Aryan

Professor Jespersen remarks “on the very curious rule in the old Indian drama that women talk Prakrit (*prākṛita*, the natural or vulgar language) while men have the privilege of talking Sanskrit (*saṃskṛta*, the adorned language),” that “the reason certainly is that the social position of women was so inferior that they ranked only with men of the lower orders and had no share in the higher culture which with the refined language, was the privilege of a small class of selected men.” [Language, pp. 241-42.]

This is pure assumption. Social position of women, say in the third or the fourth century A.D., cannot be judged from the social status of women in India during and after the Muhammadan rule. Then again there is a class of dramas, technically known as *saṭṭaka*, wherein all the *dramatis personæ* speak Prakrit. Rājaśekhara's Karpūramañjarī is a drama of

this type. In the monologue plays, termed *bhāṇa*, the earliest specimens of which go back to the sixth century at least (e.g., the 'Ubhayābhisārikā' in the 'Caturbhāṇī') all persons talk Sanskrit.

Prakrit speech being considered more sweet and mellow than Sanskrit female characters in the dramas (heroines and high class women) speak that language. This is the reason why female hermits and nuns as well as female personifications of austere virtues (in allegorical dramas) speak Sanskrit instead of Prakrit. Thus in the fragments of dramas of Aśvaghoṣa discovered in Central Asia—the earliest specimens of dramatic literature in Sanskrit—*Buddhi* 'Intellect', *Dhṛti* 'Patience' and *Kīrtti* 'Fame' speak Sanskrit. So also in the Prabodha-candrodaya *Sānti* 'Peace', *Śraddhā* 'Faith', *Kṣamā* 'Forbearance' etc., talk Sanskrit, while *Rati* 'Love', *Mati* 'Thought', *Trṣṇā* 'Desire' etc., talk Prakrit.

The Prakrit fragments of Sanskrit dramas, Prakrit poems like the *Gāthāsattasāi*, and the Prakrit glossaries contain a large number of words which apparently belonged to women's language. The more important of these are given below.

Substantives.

ajjā, *ajjhā* [<Old Indo-Aryan *āryā*] 'a young woman, an unmarried girl'.

aṇuvahuā [<Old Indo-Aryan *anuvadhukā*] 'a newly married girl or daughter-in-law'.

aṇusūā 'a woman in advanced pregnancy'.

akkasālā 'a slightly intoxicated woman'.

attā [*Gāthāsattasāi* 5. 69 ; 6. 42 ; etc.] ; *aliā* ; *atyayāriā* ; *ālī* ; *kakkhaṇḍagī* ; *kaliā* ; *golā* ; *piucchā* [<O. I.-A. *pitṛṣvasā* 'father's sister'—aunts are generally the *confidante* of young women ; *Gāthāsattasāi* 2. 10 ; 3. 95 ; 6. 37 ; etc.] ; *balavatṭī* ; *marālī* ; *māuā* [<O. I.-A. *mātrkā* ; *Gāthāsattasāi* 3. 40 ; 5. 23 ; etc.] ; *māucchā* [<O. I.-A. *mātrṣvasā* ; *Gāthāsattasāi*, 7.48] ; *sāhulī* 'female friend'.

ajjhā ; *adayā* ; *adayaṇā* (*adāṇā*) ; *ahabbā* [*< O. I.-A. abhavyā*; *Gāthāsattasaī* 4. 90; etc.]; *kelī* [*O. I.-A. <kreḍi* *sport*]; *komārabandhaī* [*< O. I.-A. kaumārabandhakī*; *Mālatimādhava*]; *khaṇḍaī* ; *chiṇṇā* ; *chiṇṇālī* ; *cheñchaī*, *chiñchaī* [*Gāthāsattasaī* 4.1 ; 4.50] ; *jhaṇḍalī*, *jhaṇḍulī* ; *puṇṇālī* [*cf. O. I.-A. puṇṣcalū*, -lī] ; *bhaṇḍī* ; *bhambhī* ; *muraī* *unchaste woman*.

aṇādo, *aṇādo* *paramour*.

ammakā [*< O. I.-A. ambā-*] ; *paujuvaī* [*< O. I.-A. paṭuyuvati*] ; *malavattī* ; *vodahī* [*Gāthāsattasaī* 4. 92] *young woman*.

ahiviṇṇā *a woman who has subsequently got a co-wife*.

ānandabaḍa [*< O. I.-A. ānandapaṭa*] *cloth of a girl in her first menses* [*Gāthāsattasaī* 5. 57].

āvi *labour pain*.

āvattīā ; *āviajjhā* ; *olaanī* ; *kīlā* ; *kukulā* [*cf. O. I.-A. kukula* *husk which is used as fuel*] ; *gāgejjā* ; *vahudhāriṇī* ; *hatthacchuhani* *newly married girl*.

airāṇī, *erāṇī* *a woman who has taken up a vow of Indra (indra-vrata)*.

eghiṇīā *the woman who, in a particular ceremony, is measured lengthwise by a thread which is subsequently thrown away*.

olaggāviā [*Karpūramañjarī*] ; *khoṭṭī* ; *cunṇāsī* ; *tālapphalī* ; *dullasiā* *a female servant* ; *veiā* *a female servant who draws water*.

kojappa [*< O. I.-A. (?) kojappa*] *woman's secret*.

kolīṇa *evil talk, gossip* [*Mālavikāgnimitra*] *< O. I.-A.*

kaulīṇa, e.g., *mā kaulīṇād asitanayane mayy aviśvāsini bhūh* [*Meghadūta*].

kantārattana *wretchedness* [*Karpūramañjarī*].

koṭṭavī *a naked woman*.

khuruḍukkhuḍī *mock anger in love*.

govī *a female child*.

cillakā *a doll* [*Therigāthā*].

candavadāyā *a half-dressed or semi-naked woman*.

cimphullanī *woman's underwear*.

cakkhurakkhaṇī [<O. I.-A. *cakṣurakṣaṇī*]; *jhīrā*; *picchilī*; *mantuā*; *viddā*; *viliā*; *viddūnā*, *vedūṇā*, *velūṇā*; *śīrovahasiā* [<O. I.-A. *śīro'vahasikā*] « shyness, coyness ».

āhunduro; *ḍaharo*; *dillindilio*; *duddhagandhimuho* [<O. I.-A. *dugdha-gandhi-mukhaḥ*]; *paḍao*; *silimbo* « boy child ».

indamaho « son of an unmarried woman ».

chiṇṇo, *chiṇṇālo*, *chiñchao* « a characterless man ».

jāda [<O. I.-A. *jāta*] « dear child (in addressing) ».

jhoṭṭī « semi-queen, i.e., second wife of a king ».

chibollaa [*chī* « fie » + *bolla* « speech »] « uttering of the word 'fie' » [Gāthāsattasāī, 7.3].

tārāmettaa, *tārāmettī* [<O. I.-A. *tārāmaitraka*, *-maitrī*] « woman's unselfish love for man »; [Mālatīmādhava].

tittilla « a daring person » [Gāthāsattasāī, 6.56].

tanti, *tantī* « anxiety » [Gāthāsattasāī, 1.51; 3.73].

dunduminī; *vilayā* « a beautiful woman ».

dummainī, *duṭṭhuruhaṇḍā*; « a quarrelsome woman ».

dhārillīā « childish greed »; [Gāthāsattasāī, 7.61].

paṇāmaṇīā « woman's love for woman ».

paṇhucchahaṇī « a married girl brought for the first time from her husband's home ».

pāḍiajjho « the man who takes a newly-wed girl to her husband's home from her father's place ».

pīluā « a young one » [Gāthāsattasāī, 2.2].

pīḍaraī « a thief's wife ».

puā, *puāinī* « a woman seized by a spirit; a mad or unbehaved woman ».

bakkara « a jest » [Viddhaśālabhañjikā; Karpūramañjari].

buttī, *mayalabuttī* « a woman in her menses ».

bundinī « a bevy of unmarried girls ».

bhāvaiā « pious matron ».

maṭṭuhia « mock anger of a newly-married girl ».

mukkaya « marriage of a girl invited at the marriage ceremony of another girl ».

maṇḍana « quarrel » [Gāthāsattasāī, 6.13].

vāullaa « a doll » [Gāthāsattasāi, 3.17].

vacchimao « child-bed ».

varaṭṭo « a newly-married young man ».

varaṭṭako « best man of a bridegroom » [Viddhaśālabhañ-jikā].

vahuhādinī « a second wife »

vāsū, vāsū « a girl, a hetaera ».

saṃbhavo « premature old age due to constant child-bearing ».

sampattiā « a girl child ».

suhelli, suhelli [< O. I.-A. (?) *sukha-kreḍi*] « pleasure, happiness » [Gāthāsattasāi, 2.8; 4.68].

sapajjiā, saajjiā « a neighbour woman » [Gāthāsattasāi, 1.36, 39].

hulubbī « multipara, a mother of many children ».

halahalaa « anxiety » [Gāthāsattasāi, 1.21]; cf. *raṇaraṇaka*.

Adjectives.

aliasīlā « habitual cheat » [Priyadarsikā] [< O. I.-A. *alīkasīlā*].

olaññī « beloved ».

bhelī « ignorant (woman) ».

laḍaha « charming » [Mālatīmādhava; Gāthāsattasāi, 1.7].

cheā « smart (woman) » [Gāthāsattasāi, 4.52].

kandajjuā [< O. I.-A. *kāṇḍarjukā*] « straight as a log, i.e., very simple (girl) » [Gāthāsattasāi, 4.52].

khudakkīā « indignant and silent » [Gāthāsattasāi, 3.26].

It is an almost universal practice to call a daughter « my son » lovingly. We find a very early example of this in the Therīgāthā; e.g., *utṭehi puttaka kiṃ socitena dinnā si Vāraṇavatimhi | rājā Anikaratto abhirūpo tassa tvaṃ dinnā ||* « Get up, child. Why worry? You have been given (i.e., married) to the handsome king Anikaratto at Vāraṇavatī » [462]; *bhuñjāhi kāmabhoge...putta* « indulge in pleasures,...my child » [464].

Compound Formations.

As in New Indo-Aryan pejorative compounds with *hata* 'killed', *dagdha* 'burnt', etc., are not rare in women's dialect in Middle Indo-Aryan. Thus :

hada-> *haa*-[<O. I.-A. *hata*] :—*hadāsa*, *haāsa*, *hadāsā*, *haāsā* 'cursed (man or woman)' [Gāthāsattasāī; etc.]; *haaggāma* 'the cursed village' [Gāthāsattasāī, 2.64]; *haatth-ana* 'cursed breasts' [Gāthāsattasāī, 3.58]; *haarāi* 'cursed night' [ibid. 4.35]; *haalajjā* 'cursed shyness' [ibid. 7.16].

-haada [<O. I.-A. *hataka*] :—*kaliṅghadaa* 'the accursed king of Kalinga' [Priyadarśikā]; *debbahadaa* 'accursed fate' [ibid.]; *kāmsuhadaa* 'the accursed Kāṃsa' [works ascribed to Bhāsa].

daddha-, *daddha*-[<O. I.-A. *dagdha*] :—*daḍḍhakāya* 'cursed body' [Gāthāsattasāī, 2.34]; *daddhahiaa* 'cursed heart' [ibid. 2.41]; *daddhaloa* 'accursed people' [ibid. 6.1]; *daddhapemma* 'accursed love' [ibid. 6.10]; *daḍḍhagāma* 'the cursed village' [ibid. 6.100].

Verbs.

The verbs meaning 'to eat' has been used, throughout the history of Indo-Aryan, in the pejorative sense 'to lose' in the language of women. Pāṇini has an aphorism—*nāḍiny ākroṣe putrasya*, viii.4.48 'the *t* of *putra* is not doubled when the word *āḍini* [<*ad* 'to eat'] follows and censure is implied'.

This shows that the idiom in question was not unknown in the Old Indo-Aryan period. This idiom also occurs in the Therīgāthā, e.g., *sājja sabbāni khāditvā satta puttāni brāhmaṇi | vāsetṭhi kena vaṇṇena na bālham paritappasi* || 'Having eaten up thy seven sons, why do you not, O Vasetthi the Brahmin woman, repent to-day?' [313].

In the Gāthāsattasāī the verb *sāh* 'to speak' [<O. I.-A. *sādhay*] occurs in women's speech only, e.g., *sāhai* [6.42]; *sāhāmo* [6.100]; *sāhasu* [7.88], etc. But elsewhere its use is not so restricted.

Relation words.

Women's vocabulary in Middle Indo-Aryan is unusually rich in words denoting marriage and blood relations. A few of these words have Indo-European cognates. The following such words appear in Middle Indo-Aryan for the first time.

akkā 'mother, sister' cf. Greek 'Ακκώ 'the nurse of Demeter'; Latin *Acca Larentia*.

attā 'mother, elder sister, father's sister, mother-in-law'; cf. Greek 'ἄττα; Latin *atta*.

ajjkā 'mother' [Priyadarśikā]; *ajjū* 'mother-in-law'.

aṇṇī 'husband's sister; father's sister; wife of husband's younger brother'.

ammā [<O. I.-A. *ambā*]; *allā*, *abbā*; *subbiā* 'mother'. By transference *ammā*, etc., are used in affectionately addressing a daughter; e.g., *amma Jīvā 'ti vanamhi kandasi attanaṃ adhi-gaccha* 'you wail in the wood, crying 'O Jīvā, O my daughter dear'' [Therīgāthā, 51].

aṇṇao; *ekkagharilla*; *cheo*; *duddamo* [<O. I.-A. *durdama*]; 'husband's younger brother'.

pupphā [<O. I.-A. *puṣpā*] 'husband's sister'.

bhāūjjā [<O. I.-A. *bhrātrjāyā*] 'brother's wife'; Bengali ভাউ.

bhāo 'husband of elder sister'.

mādaliā 'mother, mother's sister'.

māmikā 'little mother (affectionate term)' [Therīgāthā, 207].

vahubbā 'wife of father-in-law's younger brother'.

vahumāā [<O. I.-A. *vadhūmātā*] 'daughter-in-law (affectionate term)' [Gāthāsattasāī, 6.7]; Bengali বউমা.

sabhariā [<O. I.-A. *sabhāryā*] 'co-wife' [Therīgāthā].

Expletives.

Expressing joy and surprise :---*ammo*, *amho*, *ammahe*.

Vocative particles :---*aḥ*; *de* [Gāthāsattasāī, 1.16, 27; 4.45, etc.]; *bale* [e.g., *bale kiṃ nigghīṇo si maṃ* 'Oh! why

are you unkind to me? » Kātyāyana under Vararuci (Prākṛta Prakāśa), ix.12]; *vebba* [e.g., *vebba muramdale vahasi pāṇiam* « O Muramdālā, art thou carrying water? » Hemcandra, ii.195].

Vocatives for addressing a female friend :—*māmī* [Gāthāsattasāi]; *halā*, *hale*.

ū—expressing displeasure, scorn or surprize [Hemcandra, ii.199].

alāhi « away! » e.g., *alāhi sahi leheṇa* « no use of a letter, my friend » [Kātyāyana under Vararuci, ix.11; Gāthāsattasāi, 2.27].

thū « fie! » e.g., *thū nillajjo loo* « fie! shameless people » Hemcandra, ii.200.

abbo—expressing joy, surprize, fear, etc., also a vocative particle [Gāthāsattasāi, 3.73; 4.6.; 5.75; 6.35, etc.].

hañje, *hañde*—vocative particles used by low-class women.

haddī, *haddhi*, *haddhī* [<O. I.-A. *hā dhik*]—expressing sorrow or fear.

Proverbial Expressions.

Proverbial expressions occur here and there in the speech of the female characters of Sanskrit dramas. The poet Rājasekhara was especially fond of putting in these expressions in his dramas. Thus :

kadham via jñantādo kīkalāsādo sira-suvannam pābiadi « how can one get the gold from chameleon's brow while it is alive? i.e., it will be kept strictly secret » [Viddhaśālabhañjikā].

kim gade viāhe ṇakkhattaparikkhāe « what is the use of looking for the stars when the marriage is over? i.e., there is no use crying over spilt milk » [ibid.].

kim daddurū vāharanti tti devo puḍhaviṃ varisidum visu-maradi « does the god stop sending rains down on the earth because of the frogs croaking? » [Mālavikāgnimitra].

keāṅkusumavāsīdassa khadirasārassa vi aṇṇo gandhuggāro « quite another is the smell of catechu extract when scented

with Ketakī flower, i.e., circumstances alter cases » [Viddhaśālabhañjikā].

ko junnamañjaram kañjireṇa veārium tarai « who can bring himself to tantalize an old cat with sour gruel? » [Gāthāsattasaī, 3.86].

ṇaḍe diṭṭhe maṇḍide ubaviṭṭho paī maṇḍito « 'when the actor was seen adorned, the husband closeby was scorned' » [Viddhaśālabhañjikā].

tahim gaccha yahim me padhamasāhuliā gadā « you take yourself off to where my first swaddling clothes went, i.e., go to the devil may care where » [Karpūramañjarī].

tā kiṃ phuttau bīam « shall the seed burst? i.e., shall the truth be spoken? » [Gāthāsattasaī, 3.28].

sabbo sagandhe vīasadi « every one believes in his kin » [Śakuntalā]. Cf. *sarisā sarise rajjanti* « like will to like » [Priyadarśikā].

sabbassa vallaho jāmādā bhodi « every one is fond of a son-in-law » [Priyadarśikā].

so jjeva siritālīpattasaṃcao tāo jjeva akkharapaṃtīo « the same piling together of palm leaves, the same word series, i.e., threshing the same old straw » [Karpūramañjarī].

CHAPTER IV

New Indo-Aryan : Bengali

In dealing with the women's dialect in Bengali in the present treatise, the author has confined himself only to the standard colloquial of Western Bengal. Dialects of Northern, Eastern and Central Bengal have been omitted as none but native speakers can have a thorough and intimate acquaintance with the women's idiom current in those areas.

It should be emphasised here that many of the words and expressions ascribed to women speakers here are not infrequently used by men as well. But it cannot be denied that such expressions as *তেলে বেগুনে ধলে' ওঠা* « to fly up in a rage »; literally,

to burst out as brinjal with oil in a frying pan », etc., which are spoken by everybody whether man or woman, originated in the kitchen and therefore properly belong to women's vocabulary.

As expected, women's dialect in Bengali is archaic both in pronunciation and vocabulary. There are a great many words spoken generally by women, which occur in mediaeval Bengali works—especially the Vaiṣṇava lyrics—but not in modern Bengali as spoken by men.

Pejoration and vulgarity are also dominant characteristics of the language of Bengali women. This tendency, however, is on the wane, and now only to be found with low-class women.

Mediaeval Bengali works, especially the Śrīkṛṣṇakīrtana of Caṇḍidāsa and the Vaiṣṇava songs and lyrics, supply good material for the study of women's dialect of early and late Middle Bengali. The works of Bhāratacandra (18th century) and the dramas of Dinabandhu Mitra (latter half of the 19th century) are also rich in this respect.

CHAPTER V

Bengali : Substantives

The following are the more important substantives used by women exclusively. A few, however, have intruded into men's vocabulary as well.

অপ্চ [< O. I-A. *apacaya* : semi-tatsama] « excess, spilling ».

অকাজ [MB*] « useless task, unpleasant task », e.g., এখনি তুমিনী পড়ল অকাজ « you dear lady, an unpleasant task has befallen me » [Govindadāsa]; অকাজে দিবস গেল « the day is spent in a thankless task » [Jñānadāsa].

অলঙ্ঘাল [MB] « mischievous pranks or jokes », e.g., মিছা অলঙ্ঘাল তেজ বহ দখিভার « leave off your pranks; carry the weight of curds » [Śrīkṛṣṇakīrtana].

* MB = Middle Bengali.

অগুণ [MB] « a bad turn », *e.g.*, কিবা তার কৈলোঁ অগুণ « what evil have I done to him » [ibid].

অনাছিষ্টি [< O. I-A. *anāsṛṣṭi* ; sts.*] « uncommon something ».

আচাভূয়া [< O. I-A. *atyadbhuta*] « a wonder », *e.g.*, নাহি দেখি আরতি কেবল আচাভূয়া « I do not find any fortune, only a wonder » [Bhāratacandra, Annadāmaṅgala].

আদিবস [MB] « a bad day > misfortune », *e.g.*, কেহে হেন কৈলে কাহাঞি মোর আদিবসে « why have you done me this wrong, O Kāhnāñi » [Śrīkṛṣṇakīrttana].

আথাস্তর [also MB] « being at a loss », *e.g.*, আজি কোণ আথাস্তর করিবেক রাধা « what a row would Rādhā kick up to-day » [ibid].

আস্থখ [MB] « sorrow, worry », *e.g.*, আস্থখ না কর « do not worry » [ibid].

আটকাল « measure ».

আঁটকুড়ো, -কুড়ী « a man or woman who had never any issue ».

আড়ি « (i) sportive quarrel, (ii) eavesdropping », *cf.* আড়ি পাতা *infra*.

আদিক্খেতা [< O. I-A. *ādhikyatā* ; sts.] « effusive or gushing affection » ; pejorative.

আস্বা « excessive demand as of a child » ; pejorative.

আহিঙ্কে [< O. I-A. ? *ākāṁkṣā*] « inordinate desire as of a child » ; pejorative.

আয়ত্ [O. I-A. *avidhavatva*] « the state of husband-living ».

উসর [< O. I-A. *avasara*] « leisure ».

উল্লাল [MB] « joy, pleasure », *e.g.*, তোক দেখি নাতিনী মো পাইলোঁ উল্লালে « I am overjoyed to see you, my grand-daughter » [Śrīkṛṣṇakīrttana].

এয়ো [< O. I-A. *avidhavā*] « a woman with her husband living ».

এয়োত্ : see আয়ত্ *supra*.

কল্লা « affectation » : pejorative.

কচাল [MB] « idle talk, argumentation » ; e.g., *যুচাহ কচাল কাহ্নাঞ তেজ মোর আশে* « no use arguing, Kāhnāñi, leave off all hopes of getting me » [Śrīkṛṣṇakīrtana].

কাপ [< O. I-A. *kalpa*] « affectation » : pejorative.

কানড়া, কানোড়া, কানড়া « obedient (child) ».

কু [< O. I-A. *ku-*] « evil ».

কুলুকুখেন্তর [< O. I-A. *Kurukṣetra* : sts.] « a big quarrel, a row ».

কুটনী [< M. I-A. *kuttanī*] « a gossip, a characterless woman ».

কোটনা—masculine to the above; pejorative.

কুঁতুল, কৌদল « quarrel » [< O. I-A. *kṛand-*].

কৈড়েলি « impertinence, roughness » : pejorative.

কুঁতুলী, কুঁতুলে « a quarrelsome woman or man ».

খোয়ার [Perso-Arabic] « insult, ill-treatment ».

খাঁই « excessive demand » : pejorative.

খোঁটা [also MB] « smarting reproof, taunt, infliction » ; e.g., *ননদী বিষের কাঁটা বিষমাখা দেয় খোঁটা* « my sister-in-law is like a poisonous dart, and her taunts prick as such » [Caṇḍidāsa] ; *পাছে বল বুনিপোর মাসী দেয় খোঁটা* « lest you say, 'my aunt taunts me' » [Bhāratacandra, Vidyāsundara].

খাঁখার, খাঁকার, খাঁকারি [MB] « blame, taunt » ; e.g., *না কহিলে মরি কহিলে খাঁকারি* « I die if I do not speak out, and if I speak out I shall get blame » [Govindadāsa] ; *ইহল কুলের খাঁখার* « there is a bad name to the family » [Jñānadāsa]. It occurs also in the Śrīkṛṣṇakīrtana.

গতর [< O. I-A. *gātra* ; sts.] « activity, capacity for physical labour ».

গিদে, গ্যালা, গ্যাদরা, গুমোর, গোমোর « insolence, pride » ; pejorative.

গা [< O. I-A. *gātra*] « inclination ».

গোহারী [MB] > গৌয়ারী « earnest and tearful prayer » ; [Śrīkṛṣṇakīrtana] ; e.g., *নাহি মানে প্রজার গোহারী* « he did not listen to the people's prayer » [Mukundarāma].

চিকুরী, চিকুরণী « affected innocence » ; pejorative.

চেগরা = insolent youth > [Bhāratacandra, Vidyāsundara].

ছিরি [< O. I-A. *śrī* ; sts.] = comeliness >.

ছেনাল, ছেনার, ছেনারী [< M. I-A. *chinnālī*] = a coquette, a characterless woman >. Also in Śrīkrṣṇakīrttana.

ছেনালী = coquetry >.

জলজলি = drudgery, misery >.

জকথি [< O. I-A. *yakṣa* ; sts.] = a witch >.

জলজলা = decorum, sense of decency >.

বিয়ারী [MB] > বিউড়ী = a daughter of the family, a daughter >.

বগড় [MB] = wrong, transgression > ; e.g., কি মোর বগড় ভৈল মথুরার পথে = what wrong have I done on my way to Mathurā? > [Śrīkrṣṇakīrttana].

টঁস = haughtiness, arrogance > ; pejorative.

টাঁইস, তাঁইস = alertness > ; also adjective.

ঠমক = arrogant and coquettish gait >.

ঠাঠ = coquettishness > [Bhāratacandra].

ঠোনা = a blow on the cheek with the finger >.

ঠেকার = excessive arrogance > ; pejorative.

ঢঙ্গ [also MB] = playfulness > (pejorative); e.g., গোবিন্দ দাসের বচন মানহ না কর এমন ঢঙ্গ = listen to the words of Govindadāsa : do not indulge in such sportiveness > [Govindadāsa].

ঢপ = coquettish movements > ; pejorative.

ঢীঢানি [MB] = behaviour of an impudent fellow > [Candīdāsa].

ঢেমন, ঢেমনা, ঢেম্নী = a characterless man or woman >.

তণ্ডী [MB] = high, harsh words > [Śrīkrṣṇakīrttana].

তুচ্ছ [< O. I-A. ? *tuccha*] = a trifle >.

দাব = respect, awe >.

দেইজি = a coparcener >.

দেমাক = arrogance > ; pejorative.

দেয়ালী [< O. I-A. ? *devakāla*-] = infant's sport >.

দুষ্মন [< Persian] = an enemy, a rogue >.

ধাধস [also MB] = labour, habit due to constant practice,

etc. > ; e.g., সে রস খাখসে খস খস হিয়া তেত্রি সে তোমারে কই > as my heart throbs in joy-force, so I say to you > [Govindadāsa].

ধঙ্গী > a tomboy >.

খাঁচা > a plea, affectedness > ; pejorative.

ধুমসী, ধুম্ভী > a grown-up girl, a fat woman > ; pejorative.

nāng [< O. I.-A. ? *anaṅga*] > paramour >.

নাট [< O. I.-A. *nṛtya*] > wild behaviour > ; pejorative ; e.g., বুড়া হলি তবু না গেল ঠাট। রাঁড় হয়ে যেন ঝাঁড়ের নাট ॥ > You have grown old, but have not yet left off coquettishness : you are a widow, but you roam as freely as a Brahminic bull > [Bhāratacandra, Vidyāsundara].

নিছন, নিছনি, নিছুনি [< O. I.-A. *nirmañchana*] > a ceremonial to remove evils >.

This word occurs in Middle and early Modern Bengali, e.g., নিছন লইয়া কাহ্নাঞি থাকু এক বাটে > let Kahnāñi remain on one side, and all well to him > [Śrīkṛṣṇakīrttana]; কাহ্নার বাছনি রে নিছুনি লয়ে মরি [Bhāratacandra, Vidyāsundara].

নেওটা, নেওটে [< O. I.-A. *snehavṛtta*, M. I.-A. *ṇehavatta*] > attached, affectionate (spoken of a child) >.

নোটোমি > villainy >.

নোলা [< O. I.-A. *lola*] > inordinate desire for food >.

ত্ৰাটা > trouble, worry >.

ত্ৰাকরা, ত্ৰাকরামি, ত্ৰাকামী > childish playfulness > ; pejorative.

পয় [< O. I.-A. *pada*] > luck, good omen >.

পাট > morning cleaning of the homestead >.

পেট > pregnancy >.

পোয়াতী > mother >.

পোষানী > giving over a child to a foster mother >.

বউভী [O. I.-A. *vadhufikā*] > daughter-in-law folk >.

বরাখুরে, বাঙ্খুরে > a stunted fellow >.

বাওচাল্লি > precocity >.

বাগড় [MB], বাগ্ড়া > detention, worry > ; e.g., এডহ বাগড় কাহ্নাঞি জাইতে দেহ ঘর > leave off detaining me; let me go home > [Śrīkṛṣṇakīrttana].

বিয়েন > child-bearing >.

বৌহারী [MB] [<O. I.-A. *vyavahārikā*] * daughter-in-law folk *; e.g., তাহে মুঞি কুলের বৌহারী * moreover I am a daughter-in-law of a family * [Candidāsa].

বাহনি [MB], বাছা * child * (affectionate term).

ব্যগ্ৰহা [<O. I.-A. *vyāgratā*; sts.] * earnest request *.

ব্যাখ্যানা, বায়নাক্ষা * detailed statement *; pejorative.

ভাজা * a ceremony during advanced pregnancy when a pregnant woman is given fried (ভাজা) paddy, rice, lentils and peas *.

ভিরকুটি, ভিরকুটি [<O. I.-A. *bhrūkuṭi*; sts.] * affectedness *; pejorative.

ভেক [O. I.-A. *bhaikṣa*] * dress, appearance, outward looks *; pejorative.

মদানি * manliness *; pejorative; মেয়ে-মদানি * manliness of a woman *.

মিন্সে * man (often referred to the husband) *.

মিতি, মিতিন, মিতিনী [early Middle Bengali] [<O. I.-A. *mitrikā, mitrānī*] * a girl friend *.

যাহু * pet vocative of a child *; cf. M. I.-A. *jāda*, *supra*, p. 11. The term যাহু in যাহুমণি evidently comes from *Yadumani*, an adjective frequently applied to Śrīkṛṣṇa.

রাঁড়, রাঁড়ী [<M. I.-A. *randā, randikā*] * a widow *.

শাশুড়ে, শ্বাশুড়ে * one who is corrupt with his mother-in-law *.

সই [<O. I.-A. *sakhi-*] * a girl friend *.

সন্দ [<O. I.-A. *sandeha*; sts.] * suspicion, guess *.

সয়া [<O. I.-A. *sakhā-*] * husband of a female friend *.

সাউকরি, সাউকুড়ি [<O. I.-A. *sādhukarika-*] * plea, excuse *; pejorative.

সু [O. I.-A. *su-*] * welfare, well-being *.

সেঙাতিনী, সেঙাতনী * a female friend *.

সোহাগ [<O. I.-A. *saubhāgya*] * affection, love *; e.g., জনম অবধি মায়ের সোহাগে সোহাগিনী বড় আমি * from the very birth I am petted very much by my mother * [Candidāsa]. In Modern Bengali it is used in a pejorative sense; e.g., বুক বাড়িয়াছে কার সোহাগে * whose indulgence has given you so much audacity? * [Bhāratacandra, Vidyāsundara].

সাধ [$<O. I.-A. śraddhā$] * a ceremony when a woman in advanced pregnancy is given desired delicacies *; cf. M. I.-A. *dohada*; *pucchia-dohala-saddhā* [Gāthāsattasāī, 5.72].

হায়া [Perso-Arabic] * decorum, shyness *; pejorative.

হড়কো * a girl disliking her husband's company *.

হেনস্থা [$<O. I.-A. hīnāvasthā$; sts.] * maltreatment *.

CHAPTER VI

Bengali : Adjectives

The following are the characteristic adjectives used by Bengali women. Most of these are, however, pejorative.

অবিয়ত * unmarried *.

অলবডড * extravagant *.

আকালসার, আকালসার [$<O. I.-A. ekaleśvara$; sts.] * selfish, wayward, perverse *; see একসরী, *infra*.

আছিদরী [M.B.] * clever *; e.g., পামরী ছেনারী নারী হাঁ বড় আছিদরী আসহন বোলহ সকলে * You wretch, characterless and clever woman, you talk what I cannot bear * [Śrīkṛṣṇakīrttana].

আজলী [MB] * foolish or small-witted (woman) * [*ibid*]; আজল, masculine to the above [*ibid*].

আবাগী, আভাগী [$<O. I.-A. abhāgyikā$] * unfortunate (woman) *.

আবাগে, আভাগে, masculine to the above.

আকুটে * extravagant *; pejorative.

আজবোজ * foolish, idiotic * [Bhāratacandra, Vidyāsundara].

আদেখ লা * excessively greedy *; pejorative.

আবালী [MB] * simple (girl) * [Śrīkṛṣṇakīrttana].

আহ্লাদে, আহ্লাদী * spoilt child *; pejorative.

একসরী [$<O. I.-A. ekeśvara$; sts.] * unaccompanied, all alone *; e.g., একসরী হৈলোঁ মোঁ হেন ঘোর বনে * I am left all alone in such a dense forest * [Śrīkṛṣṇakīrttana]; সেজাত স্ত্রীতী একসরী নিন্দ না আইসে * lying on bed all alone, sleep does not steal over my eyes * [*ibid*]; একসরী যাইতে যমুনাতীর। অলখিতে আওল শ্যামশরীর॥ * while on my way to the banks of the Yamunā all alone, that dark-complexioned one surprised me * [Jñānadāsa].

কাজুন্তী « active »; see *infra*.

কোলাৎ « youngest (child) ».

গরবানুকী « proud wretch » [Carey's Bengali Grammar].

গরঞ্জালী [MB] « quarrelsome »; *e.g.*, গরঞ্জালী বুড়ী আছে তোমার পাশে « the quarrelsome old woman is by your side » [Śrīkrṣṇa-kīrttana].

গস্তানী « strumpet » [Bhāratacandra; Carey].

গেদারী « conceited wretch »; pejorative.

টেটনী [MB] [<O. I.-A. *dhr̥ṣṭa*-] « unmanageable wretch »; *e.g.*, তাহাত টেটনী রাখা কি করিবি বুধী « what would you do, you unmanageable wretch, Rādhā? » [Śrīkrṣṇakīrttana].

টেটী, টেটী [<O. I.-A. *dhr̥ṣṭa*-], the same.

ডব্কা « raw, youthful »; pejorative.

ডাগর, ডিগর « big, biggish ».

ডেকরা, ডোকরা, ডোকলা « extravagant »; pejorative.

ঢলানী « flirting (woman) »; pejorative.

ঢোস্কা « aged, old »; pejorative.

থুব্‌ডো, থুব্‌ড়ী « old, aged »; pejorative.

দজ্জাল « a vixen » [Perso-Arabic].

দশবাইচণ্ডী [<O. I.-A. *daśabāhu-caṇḍī*; sts.] termagant (woman) ».

দশাসই « stalwart ».

দস্তি « naughty (child) ».

দুখমতী [MB] « miserable » [Śrīkrṣṇakīrttana].

ধনী « arrogant (girl) »; pejorative.

নটকী [MB] « coquettish, playful, sportive (girl) » [Śrīkrṣṇakīrttana].

নারেবড় [MB] « impudent » [*ibid*].

নাচুনী [also MB] « coquettish, sportive (girl) »; pejorative.

নাপানী, নাফানী « a tomboy »; সে বলে নাফানী আলো না জান আপনা « she says, 'you, tomboy, do you not know your own affairs?' » [Bhāratacandra, Annadāmaṅgala].

নিদুখ [MB] « pitiless »; *e.g.*, ভাল মতে মোর দুখ কথা কহ নিদুখ কাহ চরণে « speak all my woes in detail to the pitiless Kāhna » [Śrīkrṣṇakīrttana].

নিলাজ, নিলাজ [also MB] «shameless» *e.g.*, নিলাজ কাহ্নাঈ তোর বাপে নাহি লাজ «you shameless Kāhnāī, you have no shame, even from your father down» [*ibid*].

পর্য্যাক্ষ «lucky, auspicious».

পর্য্যাক্ষ «lucky».

পোড়া «cursed» [also in MB] [see *supra*, p. 21]; *e.g.*, পোড়া লোক না জানে পিরীতি বোলে কারে «the cursed people never know what is called 'love'» [Candīdāsa]; ননদী দ্বিগুণ বাদী এ পোড়া পড়নী «(my) sister-in-law and the cursed neighbours were doubly against me» [*ibid*]; পোড়া সে পাড়ার লোক দেখিয়া ডরাই «cursed are the neighbouring people: I am afraid of meeting them» [*ibid*].

বিয়ন্ত «one who has recently borne a child» ; < *viya* + sts. -*anta*.

বিটলে, বিটেল «hypocrite».

বিদ্বানী «(a woman) who has received some education»; pejorative.

বেহায়া [Perso-Arabic] «shameless»; pejorative.

ভাগ্যমানী [*cf.* O. I.-A. *bhāgyavant*-; sts.] «fortunate (woman)».

মচ্ছিভঙ্গ «morose».

মৌনবতী «speechless, not in a talking mood»; pejorative.

যুবো «youthful» ; *e.g.*, যুবো বয়েস «young age».

রূপসী «beautiful (woman)»; pejorative.

রাজ্য, রাজ্যি—an emphatic or intensive colourless adjective.

সেয়ানা; সোমন্ত [< O. I.-A. *samartha*] «adolescent, come of age».

সোহাগী «excessively petted»; সোহাগিনী [MB].

CHAPTER VII

Bengali : Relation-Words

The following words, denoting marriage relations, are exclusively used by women. Men have different terms (where possible).:

ঠাকুর « father-in-law » in the compounds :—ঠাকুর-বি « sister-in-law »; ঠাকুর-পো « brother-in-law, i.e., husband's younger brother »; ঠাকুর-জামাই « father-in-law's son-in-law, i.e., husband of husband's sister »; বড় ঠাকুর (>বড়ঠাকুর) « husband's elder brother ».

ঠাকরুন [*< ঠাকুরাণী*] « mother-in-law ».

দেওর [*< O. I.-A. devr, devara*] « husband's younger brother »; the word ঠাকুর-পো is generally used in addressing. দেওর-বি « daughter of husband's younger brother »; দেওর-পো « son of the same ». See p. 7.

নন্দ [*< O. I.-A. nanāndr*] « husband's sister ». The term ঠাকুর-বি is used in addressing. See p. 7.

নন্দাই [*< O. I.-A. nanāndr-pati*] « husband of husband's sister ». The term ঠাকুর-জামাই is used in addressing.

ভাতার [*< O. I.-A. bhatr*] « husband ». This word is now considered vulgar.

ভাসুর « husband's elder brother ». The term বড়ঠাকুর is used in addressing. ভাসুর-বি « daughter of the same »; ভাসুর-পো « son of the same ».

বোন-পো « sister's son », বোন-বি « sister's daughter ».

ভাগনে, ভাগ্নী [*O. I.-A. bhāgineya, bhāgineyī*] « son or daughter of husband's sister ». But men use these terms for their own nephew or niece.

পিসাস [*< O. I.-A. pitr-śvaśrū*] « husband's father's sister »

মাসাস [*O. I.-A. mātṛ-śvaśrū*] « husband's mother's sister ».

ষা [*< O. I.-A. yātr*] « wife of husband's brother ». See p. 7.

সতীন [*< O. I.-A. *sapatnini*] « co-wife ».

সতা, the same [*< M. I.-A. savatti < O. I.-A. sapatnī*]. This word has now become archaic.

CHAPTER VIII

Bengali : Derivatives

The following suffixes and prefixes occur in words which are mostly used by women :

-অনী, -অনি [MB, archaic in Modern Bengali], -উনি :—পোড়নী
 ‘burning’; e.g., এবে মোর মনের পোড়নী ‘now my heart burn-
 ing’ [Śrīkrṣṇakīrttana]; সদাই এখনি পরাণ পোড়নী ঠেকিনু পিরীতি রসে
 ‘I have tasted of (the bitter) dose of love, and constant heart-
 burning has followed’ [Caṇḍidāsa]. বলনী, চলনি, হেলনি, e.g.,
 বাহুর বলনী অঙ্গের হেলনি মস্তুর চলনি ছাঁদে ‘in the manner of (her)
 flourish of arms, movements of body and slow gait’ [Govinda-
 dāsa]. তাজনি [<O. I.-A. *tarjjana*; Caṇḍidāsa]. নিছনি (see
supra). কাঁদনি ‘crying’, বাঁধনি ‘tying’, সাধনি ‘entreat-
 ing’ [Rabindranātha, Kṣaṇikā]. In modern standard colloquial
 Bengali words like কাঁছনি (<কাঁদনি) are used in a pejorative sense.

[Cf. S. K. Chatterji, *Origin and Development of the Bengali Language*, p. 657f.]

-অন [a verbal noun-making suffix like the above; it is also
 becoming archaic in standard colloquial Bengali] :—কাঁদন ‘cry-
 ing’; কুঁদন ‘frolicking’; চলন ‘gait’; ছাড়ন ‘leaving’; জ্বলন
 ‘burning’; ব্যস্তন ‘worry’; ঝেঁটন ‘cleaning with a broom’; থাকন ‘stay-
 ing’; দেখন ‘seeing’; নাচন ‘dancing’; ফেরন ‘turning’; বলন
 ‘talking’; কাঁড়ন ‘piercing’; বেঁধন ‘piercing’; যাওন ‘going’,
 etc.

[Cf. S. K. Chatterji, *op. cit.*, p. 656.]

-অস্ত [occurring in some adjectives] :—সাজস্ত ‘fitting’; বাড়স্ত
 ‘increasing’; উঠস্ত ‘rising’; বিয়স্ত ‘bearing (child)’; হাসস্ত
 ‘smiling’; ঘুমস্ত ‘sleeping’; ভাসস্ত ‘floating’ > big and watery’.

[Cf. S. K. Chatterji, *op. cit.*, p. 653.]

-অস্তী [feminine form to the above] :—কাজস্তী, কাজুস্তী ‘hard-
 working’; দেখুস্তী ‘looking on’; নাচুস্তী, নাচুস্তী ‘dancing’; নিখাউস্তী,
 নিখাস্তী ‘not taking any food (pejorative)’; অবিয়স্তী ‘not bearing
 any (child)’.

-ইষ্টি (ইষ্ঠ) [<O. I.-A. *-iṣṭha*; sts.; pejorative] :—কম্বিষ্টি
 ‘very active’; দানিষ্টি ‘very charitable’; ধম্বিষ্টি ‘very pious’.

-কী [these words are generally used in addressing] :—বড়কী
 ‘the eldest daughter-in-law’; মেবকী ‘the second daughter-in-

law »; সেব্‌কী « the third daughter-in-law »; ছোটকী > ছুটকী « the youngest daughter-in-law ».

[Cf. S. K. Chatterji, *op. cit.*, p. 682.]

টি, (টা) [this enclitic definite particle is often used with the genitive case to form an affectionate word denoting the age of a child] :—সাতমাসেরটা « seven months old »; দেড়বছরেরটা « a year and a half old »; etc.

[Cf. S. K. Chatterji, *op. cit.*, p. 685 f.]

-পনা, [MB -পণ, -পণা] [indicating state or function] :—সতীপণ [MB], সতীপনা, *e.g.*, যত সতীপণ সব মিছা জাণ তারে « all her show of virtue you should know to be false » [Śrīkṛṣṇakīrttana]; না রহে সতীর সতীপনা « a virtuous woman can no longer retain her chastity » [Balarāmadāsa]. নাগরপণা « a manner of a beau », *e.g.*, এহা জাগী তেজ কাহ্নাঞি নাগরপণা « knowing this, Kāhnāñi, please let go your manner of a beau » [Śrīkṛṣṇakīrttana]. চতুরপনা « cleverness », টীটপনা « impudence » [Caṇḍidāsa]. নিঠূরপনা « heartlessness » [Jñānadāsa]. কুটিনীপনা « manner of a whore », ধূর্তপনা « manner of a clever man », সহরপনা « manner of a man about town », গুণপনা « virtuousness », [Bhāratacandra]. গিন্নিপনা, গিন্নেপনা « manner of a housewife »; দস্তিপনা « manner of a troublesome fellow »; দাসীপনা « state of a maid-servant »; আদিখোতাপনা « affectedness » [see *supra*, p. 18]; আহলাদেপনা « affectedness »; আকাপনা « affected innocence »; চেঙ্গড়াপনা « impishness »; বেহারাপনা « shamelessness »; অসভ্যতাপনা « indecorum »; দুরন্তপনা « roguishness », *e.g.*, বাতাস করিছে দুরন্তপনা বরেতে ঢুকি' « wind plays the roguish child on entering the room » [Rabindranāth, Kṣaṇikā]. Instead of the suffix -পনা men usually employ the Persian suffix -গিরি.

[Cf. S. K. Chatterji, *op. cit.*, p. 696.]

-পানা [adjective-making suffix meaning *like*] :—চাঁদপানা « moon-like »; চূণপানা « lime-like, *i.e.*, pale » ; কুলোপানা « like the winnowing fan »; হাঁড়ীপানা « pot-like, *i.e.*, grave (face) ». The suffix -পনা is also sometimes used in this sense, *e.g.*, কুলোপনা « like the winnowing fan »; দুধপনা « milk-like », *e.g.*, দুধপনা

গঙ্গাজল মূনি মন হরে * the milk-white water of the Ganges, charms the mind of a sage even * [Bhāratacandra, Mānasimha].

[Cf. S. K. Chatterji, *op. cit.*, p. 696.]

আ- [negative prefix; generally pejorative] :—আভাতারী * who has no husband but hankers for one *; আদেখলা * one who has not seen anything, i.e., exceedingly greedy *; আসেদ্ধ * half-boiled, not fully boiled *; আভাগী, আভাগে * unfortunate *; আবাঁধা * tied *, e.g., আবাঁধা চুল উড়তেছিল উদাস হাওয়া লেগে * her dishevelled locks were being fanned with the gust of wind * [Rabindranāth, Kṣaṇikā].

হা- [this prefix, which may have originated from O. I.-A. *hata* or from the interjection *hā*, “denotes absence of something and a consequent yearning for it”] :—হাষ’রে * homeless vagrant *; হাভাতে, হাবাতে * a beggar for rice *; হা-পিতোশ * longing and yearning; হাপুতী * a woman who longs for, or is exceedingly fond of, her children * [also MB].

[Cf. S. K. Chatterji, *op. cit.*, p. 712f.]

In a number of nominal phrases the numeral এক * one * sometimes behaves like a suffix. Thus :—বচনেক * one word *, নাথেক * one lakh *, শতেক * a hundred * [Śrīkṛṣṇakīrtana ; cf. তিল এক * one iota *; খানি এক (modern Bengali ক্ষণেক) * one moment *].

The word শতেক is a very frequently used adjective in women’s dialect in Bengali, e.g., শতেক নোংরা * very dirty *; শতেক কাজ * many duties *; শতেক জঞ্জাল * a thousand and one worries *; শতেক জ্বালা * a thousand and one troubles *; উঠিব শতেক দূর * I shall rise much higher * [Nursery rhyme].

CHAPTER IX

Bengali : Compounds

Although compounds are not in the genius of the Bengali language, yet Bengali women are unusually fond of compounds, as would be evident to one who would care to listen to low-class

women falling foul of each other. All the chief types of compounds are to be found. Generally some suffixes are attached to the compounds.

1. Bahuvrihi Type.

(a) Denoting incestuous relationships: বাপভাতারী, ভাই-ভাতারী, বোনমেগো, etc. These are abusive words.

(b) Denoting physical defect or disfiguration (mostly pejorative): কালামুখ, কালামুখী *black-faced, burnt-faced*; মুখপোড়া, মুখপুড়ী; পোড়ারমুখ, পোড়ারমুখী *burnt-faced*; উট-কপালী *one having her forehead prominent like that of a camel*; ছার-কপালী *luckless*; গোমড়ামুখো, গোমড়ামুখী *wry-faced*; চুলোমুখো, চুলোমুখী *oven-faced*; চেরোন-দাঁতী *comb-teethed*; খ্যাব ডানাকী *flat-nosed*.

(c) Miscellaneous: পাটাবুকী *one having a plank for her breast, i.e., daring*, e.g., পাটাবুকী তিরী [Śrīkṛṣṇakīrttana], একইতি [MB] *having one son*, e.g., একইতি মাএর ছাওয়াল *the only son of a mother* [Śrīkṛṣṇakīrttana], কোল-সোহাগী *she who likes to sit on the lap*; বাপ-সোহাগী *she who is especially fond of her father*; ধনসোহাগী *she who is exceedingly proud of her wealth*; cf. সখীজন কহে শ্যামসোহাগিনী গরবে ভরয়ে দে *my friends speak of me as the darling of Śyāma, which fills me with pride* [Candīdāsa], শতেক-খোয়ারী *she who is very often molested and insulted*; অগ্নেয়ে *short-lived*; নিষিমে *one who has no feeling of repulsion* [<O. I.-A. *nirghṛṇa*]; নিসেধো *one who does not desire for anything*; নিলজ, নিলাজ *shameless*; নিদুখ *pitiless* [Śrīkṛṣṇakīrttana]; বার-দুয়ারী *one who frequents twelve doors, i.e., a public woman*; নোলা-দেগো *inordinately greedy for food*; মাগুরাড়িয়া *he whose wife is left a widow* [Prabodhacandrīkā] > মাগরৈঁড়ো.

2. Tatpuruṣa Type.

(a) *Upapada* class: পাড়া-বেড়ানী *a constant visitor of neighbours*; পাড়া-ঢলানী *one who plays the coquette among her neighbours*; পাড়া-জাগানী *one who keeps the neighbourhood awake, i.e., a coquette gossip*; পাড়া-মজানী *one who charms

her neighbours, *i.e.*, a coquette »; পাড়া-ভোলানী, the same. চোক-খাকী « she who has destroyed her eyes »; গতরখাকী « she who has ruined her body »; মাথা-খাকী « she who has eaten up her head »; ভাল-খাকী* « she who has destroyed her well-being »; ভাতার-খাকী « she who has lost her husband »—[these are of course abusive terms]. হাট-বাজার-কুড়ানী « one who goes through the markets to pick up whatever falls » [Carey]. পেট-ফেলানী « procuress of abortion ». ছিঁচ-কাঁদুনী « a maudlin creature ». ভাতার-কামড়া « she who always sticks to her husband ». বুক-জুড়ান « solace of the heart ». হাড়-জালানে « a thorough pest ». দুধ-ভোলানী « she who vomits her mother's milk, *i.e.*, one who poses to be very young ». ঢেউ-নাচানী « one who dances with the wave, *i.e.*, a coquette ». মন-বুঝ « consolation ». কোল-পৌছা « dusting of the lap, *i.e.*, the youngest child ». নেই-আঁকুড়ে « a tenacious person, < ল্যাগ (logic) + আঁকড়িয়া (a sticking person) ». দেইজি-বাঁটা « stirring the co-sharers ». ঘর-জালানী « she who harms her own people ». পর-ভোলানী « she who is sweet on outside people ».

(b) Miscellaneous : থলে-ঝাড়া « shaken down from the bag, *i.e.*, the last issue ». হাড়-হাবাতে « a born ne'er-do-well ». বেড়ী-পেটা « struck with a pair of pincers ». বাঁটা-পেটা « beaten with a broom ». বোঁছুঁড়ি « the hussy of a daughter-in-law ». ভয়-তরাসে « timid ». ঘুম-কাতুরে « very sleepy ». সর্ববরক্ষে « all safe ! ». মুখ-নাড়া, মুখ-ঝামটা « cutting taunts ». হুড়-বিস্তি « rowdyism ». মেয়ে-নেকড়া « a ladies' man ». হাততোলা « stunted charity », *e.g.*, হাততোলা মত পাবে অল্পপাণি গো « you will find small charity of food-stuff » [Bhāratacandra, Mānasimha]. দন্তে-দশা « miserable condition ». দেখন-হাসি « a grinning creature ». উড়ন-চণ্ডী « a spend-thrift ». বউ-কাঁটকী « she who tortures her daughter-in-law ». ঘোমটা-আড় « behind the veil », *e.g.*, কারো বা মুখ ঘোমটা-আড়ে আধেক চেনা « the face of some one, behind the veil, is half recognised » [Rabindranāth, Kṣaṇikā]. ঘোমটা-ফাঁদা « encircled by the veil », *e.g.*, ঘোমটা-ফাঁদা আঁধার মাঝে ত্রস্ত দুটি পাখি « (eyes like) a pair of timid birds in the darkness of the veil » [*ibid*]. ইষ্টি-ঠাকুর

* the desired god *; ইষ্টি-কুটুম্ব * the welcome relative *. এয়োস্ত্রী * a woman with her husband living *. কাঁচা-পোয়াতী * she who has recently given birth to a child *. একরত্তি * wee bit *. আপ্ত-গরজে, আপ্ত-স্বখী * one who looks for his own interests or comforts *. বাহুমণি * treasure of a child *. হতচ্ছেদা * shabby treatment *. নানাকুটি * various *. তিতি-বেরক্ত * sore tired *. জন্মায়তী * she whose husband lives throughout her entire life *. মিচ্কে-পোড়া * not outspoken, shamefaced *.

3. Dvandva Type.

As quite natural these compounds are often very loose ones; some are mere doublets juxtaposed.

বি-জামাই * daughter and son-in-law *. ভাতার-পুত * husband and son *. মায়ে-বিয়ে * mother and daughter *. মায়ে-পোয়ে * mother and son *. নাতি-নাতকুড় * grandchild and grandchild folk *. ভাই-ভায়াদ * brothers and relations *. লজ্জা-সরম * shyness and decorum *. বাড়-বাড়ন্ত * prosperity and furtherance *. ঘর-বর * family and bridegroom *. চাল-চুলো * thatched roof and oven, *i.e.*, means, livelihood *. রাধা-বাড়া, রান্না-বান্না * cooking and serving *. বত্ন-আন্তি * care and solicitude *. খুটি-মুছি * this and that *. সোনা-দানা * gold and jewellery *. রাং-রত্তি * bits of precious metal, gold and silver *. গয়না-গাঁটী * women's jewellery *. গল্প-গাছা * free and easy conversation *. খুদ-কুঁড়ো * rice bits and rice meal *. জ্ঞান-গম্য * knowledge and experience *. থিত-ভিত * home and establishment *. ছিরি-ছাঁদ * beauty and comeliness *. ছানা-পোনা * youngs and broods *. আপ্ত-বন্ধু * own people and relations *. মন্দ-ছন্দ * bad and medium *. জাত-জন্ম * caste and birth *. রঙ্গ-ভঙ্গ * sport and frivolity *. অকথা-কুকথা * harsh and bad words *. বাছ-বিচার * choice and purity *. হাকল-বিকল [MB] > আকুলি-বিকুলি * longing and yearning *, *e.g.*, বিরহে পুড়িআঁ। কাহু হাকল-বিকল * Kāhna is yearning for his love, smarting under his separation from her * [Śrīkṛṣṇakīrttana]. সাত-পাঁচ, পাঁচ-সাত * seven and five, *i.e.*, this and that *, *e.g.*, সাত-পাঁচ সখি শুনী বড়ায়ি গো রাধার বচনে * O Bādāyi, hearing this and that from Rādhā * [Śrīkṛṣṇakīrttana]. সাত-সতেরো, *the same*. নয়-ছয় * nine and six, *i.e.*, topsy-turvy *. আদর-গোবর * excessive indulgence *.

Doublets juxtaposed : ঢলা-ঢলি « close and intimate companionship » (pejorative). হিম-সিম « cold and frozen, *i.e.*, fatigued out ». গিন্নি-বান্নি « housewives and matrons ». চুলোচুলি « pulling each other by the hair », *cf.* O. I.-A. *keśakeśi*. ডামাডোল « topsyturvy ». নট-ষটি « friction ». নেটি-পেটি « nestling child, fondling ». হেঁজি-পেঁজি « common, ordinary (person) ». হাব্জা-গোব্জা « hotch-potch ». এলো-পেলো « right and left ». ফটকি-নটকি, ফস্টি-নস্টি « petty jokes ». গাডুর-গুপসো « short and stout ». নাডুর-নুডুর, নাডুস-নুডুস « fat and plump ». চাবা-চোবা, the same. নেন্‌কুড়ি-বেন্‌কুড়ি « brood of young children ». পাঁচ-পাঁচি « commonplace ».

CHAPTER X

Bengali : Nominal Phrase

1. Phrases with the Genitive.

In the following phrases the genitive is adjectival : গুণের নিধি « treasure of virtues », *e.g.*, এমন গুণের নিধি লয়ে গেল পরে « such a treasure of virtues has been won over by a third person » [Candidāsa]; গুণের পিয়া [MB] « virtuous darling », *e.g.*, সে হেন গুণের পিয়া « such a virtuous dear as he » [Govindadāsa]; গুণের ছেলে « well-behaved and good child »; রূপের ডালি « a basket of beauty, *i.e.*, very beautiful »; রূপের ধুচুনী « a washing basket of beauty, *i.e.*, bad looking » (pejorative). ষেটের বাছা « a child of sixty, *i.e.*, may the child live sixty years, or may the child be protected by Śaṣṭhī ». সোহাগের আরসী « a mirror of affection, *i.e.*, pampered child » (pejorative).

In the following phrases the genitive denotes the material or origin :

লুণীর পুতলী, ননীক পুতলি [MB]; ননীর পুতুল « a doll made of butter, *i.e.*, a very delicate and tender creature » ; *e.g.*, লুণীর

পুতলী যেহু বড়ায়ি ল। রৌদে দাণ্ডায়িলেঁ মিলাওঁ ॥ *She is a very tender creature, O Barāyi; she might melt if she stands in the sun* [Śrīkṛṣṇakīrtana]. সোনার নাতিনী [MB] *golden granddaughter* (a term of endearment), *e.g.*, সোনার নাতিনী এমন যে কেনি হইলা বাউরীপারা * (I do not know) why my treasure of a granddaughter has her mind thus distracted* [Caṇḍidāsa]; সোনার চাঁদ *golden moon*, সোনার বাছা *golden child*, সোনার লতা *golden creeper*, সোনার সীতা *the golden Sītā*—these are terms of endearment.

Miscellaneous.

আঞ্চলের সোনা *gold tied at the hem of the garment*, আঞ্চলের ধন, the same [Śrīkṛṣṇakīrtana]; অঞ্চলের নিধি, the same. অন্ধের নড়ী *blindman's staff, i.e., the cynosure*. অমুকের কল্যাণে *for N.N.'s welfare* [a parenthetic phrase]. কোলের ছেলে *the youngest child*. চোখের আড় *beyond the ken*. চোখের বালি *sand in the eye, i.e., an eyesore* [also MB], *e.g.*, ননদিনী দেখয়ে চোখের বালী *I am an eyesore to my sister-in-law* [Caṇḍidāsa]; সহজে চক্ষের বালি হৈয়াছি সবার *I have become simply an eyesore to all* [*ibid*]; *cf.* দেশান্তরি হব গুরু দিঠে দিয়া বালি *I will fly away to a foreign land and thus would rouse my superiors' anger* [*ibid*]. দাঁতের বিষ *poison at the teeth, i.e., cruel and uncharitable remarks*. দুধের ছেলে, দুধের বাছা *a suckling babe, a very tender and young child*. নাড়ীর টান *attraction of the umbilicus, i.e., affection of the mother for her child*. পেটের ছেলে *child of one's womb*. বড় মানুষের ঝি *a rich man's daughter* [pejorative]. বাপের জন্মে *from father's birth, i.e., never* [pejorative parenthetic phrase], *cf.*, নিলজ কাহাঞি তোর বাপে নাহি লাজ *you shameless Kāhnañi, from your father downwards you have not a bit of shame* [Śrīkṛṣṇakīrtana]. বাপের ভাগ্যি *father's luck, i.e., extremely fortunate* [pejorative]. বাপের বাড়ী *father's place (of a married girl)*. বিয়ের জল *nuptial waters, marriage*. ভালমানুষের মেয়ে *a good man's daughter* [pejorative]. মনের কালি *sorrow, anger*. মাথার দিব্য (দিব্য) *upon N.N.'s head!*, *e.g.*, মাথার দিব্য, উঠো না কেউ *upon (my) head! do not rise up, any of you* [Rabindranāth,

Kṣanikā]. অমুকের বরাতে, অমুকের কপালে «for N.N.'s good fortune».* ভাতান্তির (<? ভাতারটীর) মাগ «cherished wife of a husband». রামের রাধা «Rādhā, (the wife) of Rāma, i.e., a cherished wife» [pejorative]. শিবরাত্রির সন্তে «the wick on Siva's night, i.e., the only son». বত্তীর দাস «the servant of Śaṣṭhī, the guardian deity of children». সতাসতানের ঘর «a family of co-wives, i.e., an unpleasant home». সাতপুরুষের নাউখোলা «a gourd-skin to the forefather of the seventh generation, i.e., a nobody» [pejorative]. হাড়ীর হাল «plight of a very low-caste person, i.e., very miserable plight» [pejorative]. হাড়ীর খবর «information in respect of the cooking pot, i.e., very intimate and private information». যমের অরুচি, যমের ভুল «distasteful to Yama, omission of Yama» [abusive]. সাতচোরের মার «beating of seven thieves, i.e., a sound thrashing». কোণের বহড়ী (modern Bengali কোনে বউ) «recent bride, newly married daughter-in-law», e.g., কোণের বহড়ী লয়ে কোন্দলে জড়ায় «he (Nārada) implicates even brides in quarrels» [Bhāratacandra, Annadā-maṅgala].

2. Miscellaneous.

আটাশে খুকী, আটাশে ছেলে «a child born in the eighth month of its mother's pregnancy; a troublesome child». সাতাশে ছেলে «a child born in the seventh month of its mother's pregnancy». উঠন্ত বয়স (বয়েস) «adolescence». উদ্মো রাঁড়ী «a reckless widow» [pejorative]. একগলা ঘোমটা «veil hanging down up to the neck». একগজা জল «deep water». কচি খুকী «a girl child» [pejorative]. কড়ার কুটো «straw worth a cowrie, i.e., lightest duty». ক'ড়ে রাঁড়ী «she who has become a widow when still a girl in her teens». কাঁচা বয়স «young or youthful age». কাঁচা ঘুম «light sleep». কুমড়ো-কাটা বড়ঠাকুর «husband's elder brother whose only duty is to cut pumpkins in halves, i.e., a good-for-nothing fellow». খড়ম পা «the foot of which the little toe does

* Women generally use the word কপাল "forehead" in the sense of "luck, good fortune", e.g., কপাল যদি আবার ফিরে যায় "if good luck comes again" [Rabindranath, Kṣanikā].

not touch the ground in walking ». খাবার কুটুম « a relative only for the dinner, *i.e.*, a good-for-nothing fellow ». খুদে ননদ « a young sister-in-law who delights in torturing her brother's wife ». খুঁট পোয়াতী « a mother who bears stillborn children ». যুমে কাদা, যুমে শ্রাতা « profoundly asleep ». ছাই ফেলতে ভাঙ্গা কুলো « a broken winnowing basket for throwing away ashes, *i.e.*, a drudge » [pejorative]. ছোয়ালো ছোয়ালো « stout and strong; sleek and plump ». ছোট হাত « uncharitable disposition ». বড় (or লম্বা) হাত « charitable disposition ». ধুকুমার ঝগড়া « a boisterous quarrel ». ধোয়া নৈবিজি « mere rice for offering, *i.e.*, nothing » [pejorative]. নেও ভাতার « a habitually suspicious husband ». পাকা ঝিকুর « precocious ». বত্রিশ নাড়ী ছেঁড়া ধন « a treasure extricated from the thirty-two umbilical cords, *i.e.*, a cherished child ». বালশ পোয়াতী « mother of an infant ». বিয়ন্ত বাঘিনী « a tigress with her young ones, *i.e.*, a fierce woman ». বুকজুড়ান ধন « a soothing treasure ». পাঞ্চ আবখা [MB], পাঁচ অবস্থা « five states, *i.e.*, maltreatment », *e.g.*, কাহ্নাঞির হাতে পাঞ্চ আবখা « molestations from Kāhnāñi » [Śrīkrṣṇakīrttana]. পাঞ্চ সঙ্গতি, the same [MB], *e.g.*, পাঞ্চ সঙ্গতি কাহ্ন করিল আন্ধার « Kṛṣṇa has treated me shabbily » [ibid]. পাঁচ কথা « friendly talks » [also MB], *e.g.*, দুখ হুখ পাঁচ কথা কহিতৈ না পাইল « she did not get the opportunity of having chit-chats » [Śrīkrṣṇakīrttana]. মড়ুখে পোয়াতী « a woman bearing stillborn child ». মাওড়া ছেলে « a motherless child ». বুড়ো ঢোস্কা « a good-for-nothing old fellow » [pejorative]. রাই ধনী « my lady Rāi (Rādhā), *i.e.*, a proud and overbearing girl » [pejorative]. রাঙ্গা বউ « a pretty bride ». রাঁড়ী বালতী « a widow with very young children ». সাজন্ত বর « a matching bride-groom ». স্ন ছেলে « a good or well-behaved boy ». হাড়াই ডোমাই « behaviour as of very low-class peoples » [pejorative]. হাঁকরা ছুড়ী « a wanton girl » [pejorative]. বাঁঝা খাটুনী « thankless labour », বাঁঝা তর্ক « fruitless argument ». ঐড়ে ডাক « high words which lead to nothing », *e.g.*, আমি জানি অমন বিস্তর ঐড়ে ডাক « I care very little for your shouts and threats » [Bhārata-candra, Mānasimha].

CHAPTER XI

Bengali : Verbs and Verbal Phrases

The following verbs have specialised meanings in women's speech in Bengali :

খাওয়া * to eat up, i.e., to lose * [pejorative and abusive]. This idiom occurs in Old, as well as in Middle, Indo-Aryan (see *supra*, p. 13). It is also very frequent in Middle Bengali literature. Thus : তিন লোক খাওয়া মাহাদানী । সম্বন্ধ না মানে মাউলানী ॥ * the toll keeper, having lost the three worlds, does not respect my near relation (i.e., an aunt) with him * [Śrīkṛṣṇakīrttana]; যে তোর বাঁশী নিল সে খাউ ছুরি আখী * may (he or) she lose (his or) her eyes, who has stolen thy flute * [*ibid*]; খলের বচনে পাতিয়া শ্রবণে খাইলু আপন মাথা * I have eaten my head up, as I have paid heed to the words of a cheat * [Caṇḍidāsa]; আপনার মাথা খেয়ে ঘরের বাহির হয়ে আইলাম বড়াইয়ের সাথে * having eaten my head up, I have left my home with Baḍāyi * [Jñānadāsa]; খাইলু সে ধর্ম করম * I have utterly failed in my religious and worldly duties * [Balarāmadāsa]; আপনার মাথা খেয়ে মোরে না কহিল মেয়ে * my daughter has eaten up her head, and she did not tell me of it * [Bhāratacandra, Vidyāsundara].

খোয়ানো * to lose *, e.g., দিনে দিনে খোয়বি ইহ রূপ লাভনি * day by day you would lose this your beauty and charms * [Govindadāsa]; গোপতে বাঢ়ায়ে প্রেম আপনা খোয়ালু * I am lost as I have cherished love in secret * [Balarāmadāsa]; রাখাল বালক কি জানি কোথায় সারাদিন আজি খোয়ালে * I do not know where the cowboy has passed the whole day time * [Rabindranāth, Kṣaṇikā].

খোঁড়া * to comment on good things with an evil intention *.

গেলা * to gulp, to eat * [pejorative].

The Cognate Accusative.

In men's speech in Bengali the cognate accusative is almost unknown, while it is anything but rare with women. Thus :—
অবোল না বোল সুন্দর কাহ্নাঞি * you pretty Kṛṣṇa, do not talk what you should not * [Śrīkṛṣṇakīrttana]. অসইরন সওয়া * to endure

what cannot be endured *. খাটুনী খাটা *to do hard labour *. কাটনা কাটা *to spin yarn *. কুটনো কোটা *to slice vegetables *. বাটনা বাঁটা *to pound spices *. কান্না কাঁদা *to cry a cry *. বাড় বাড় *to thrive excessively * [pejorative].

Verbal Phrases.

আসা *to come *: পেটে আসা *to be born of a mother *; বানের জলে ভেসে' আসা *to come adrift in flood waters * [pejorative].

ওঠা *to rise *: ডুক্রে' ওঠা *to burst out crying, to sob *; তেলে বেগুনে জলে' ওঠা *to fly up in a rage *; ধনে ধানে ঘর উথলে' ওঠা *to grow rich with money and crops *.

করা *to do, to cause, to make *: অবাক করা *to stupefy *; কাপ করা *to mimic, to be affected *; কল্লা করা, the same; গুণ করা *to win over with charms and incantations *; নইনত্র করা *to scatter about, to ill-treat *; চৌচিয়ে বাড়ী মাথায় করা *to pick up a row at home *; বেঁটিয়ে বিদেয় করা *to drive out clean with a broom * [pejorative]; টিক টিক করা *to whine incessantly *; তুহ মুহ করা [Carey], তুই-মুই করা *to thee and thou, to despise *; খোঁতা মুখ ভোঁতা করা *to make blunt a thrashed face, i.e., to inflict heavy chastisement * [pejorative]; ধনে পুত্রে লক্ষ্মী লাভ করা *to prosper in wealth and children *; দেখ'মার করা *to beat on sight *; প্রাণ টা টা করা *to yearn for *; মুখ করা *to speak harshly *; মুখ সামাই করা *to keep quiet *; হায় করা *to take rest, to have respite *; কেঁদে হাট করা *to cry aloud * [pejorative].

কাটা *to cut, to spin, etc. *: চিপ্টেন কাটা *to make cutting remarks, to taunt *; ছড়া কাটা *to quote verses or proverbs *.

কাড়া *to use, to take out *: সাত চড়ে রা না কাড়া *not to speak even after the greatest provocation *; হাঁড়ি কাড়া *to use a fresh earthen cooking pot *.

কোটা, কোঁড়া *to pound : মাথা (or মাথামুড়) কোটা (or কোঁড়া or খোঁড়া) *to strike the forehead against a hard substance in protest *.

কাঁদা *to cry *: কাঁদা ককানো *to cry and sob *; বিনিয়ে বিনিয়ে কাঁদা *to cry in a long-drawn voice *, e.g., বাহুর বলনী অঙ্গের হেলনি মস্তুর চলনি ছাঁদে। আছুক আনের কাজ মদন বিনিয়া বিনিয়া কাঁদে ॥ *At the flourish of her arms, poses of her body and slow dancing gait,

what of others even Cupid sheds copious tears (out of love) » [Govindadāsa]; [but the phrase ইনিরে বিনিরে কাঁদা is pejorative]; হাপুস নয়নে কাঁদা « to shed copious tears ».

খাওয়া « to eat » : আদর খাওয়া « to be pampered with attention » [pejorative]; কুলোয় শুয়ে তুলোয় দুধ খাওয়া « to lie on a winnowing basket and suck milk through a cotton wick (as a baby does), i.e., to feign young » [pejorative]; পরের মুখে ঝাল খাওয়া « to drink a pungent dose through somebody's mouth, i.e., to talk of other's experiences as if one's own »; মুখ খাওয়া « to be insulted »; ব্যাথা খাওয়া « to be in labour pain »; সোণার থালায় খুদের জাউ খাওয়া « to drink rice gruel out of a gold plate, i.e., to be miserly » [pejorative]; হাততোলা খাওয়া « to live upon stunted charity »; হাঁড়ী খাওয়া « to eat stealthily out of the cooking pot ».

খাটানো « to let out, to lay out » : গতর খাটানো « to live by physical labour ».

চাওয়া « to look at » : উঁচু নজরে চাওয়া « to look at (a girl) with evil intention ».

জুড়ানো « to cool » : হাড় জুড়ানো « to have rest after great trouble » [pejorative].

জ্বালানো « to cause to burn, to cause pain, to pest » : হাড়ে নাড়ে (or মাসে) জ্বালানো « to give the utmost trouble ».

ঝাড়া « to shake out, to cleanse »; ঝেঁটিয়ে বিষ ঝাড়া « to beat poison out with a broom, i.e., to give a sound thrashing ».

টাটানো « to be stiff and paining » : চোখ টাটানো « to be envious ».

টানা « to draw » : অমুক নিয়ে টানা « to reflect on N. N. »; নিজের কোলে ঝোল টানা « to get all the soup in one's own plate, i.e., to look to one's own interests ».

ঠেকা « to touch, to come to » : তিন কাল গিয়ে এক কাল ঠেকা « to pass the three stages and arrive at the fourth, i.e., to become old » cf. গিয়া তিন কাল শেষে এই হাল « I have passed the three stages (of life) and now I am come to this plight! » [Bhārata-candra, Vidyāsundara].

ঠেলা « to push » ; হাঁড়ী ঠেলা « to push the cooking pot, i.e., to drudge in the kitchen » [pejorative].

ডাকা « to call » : বড় ক'রে ডাকা « to call in a loud voice »; ছোট ক'রে ডাকা « to call in a subdued voice ».

তোলা « to raise » : গা তোলা « to be up and doing » *e.g.*, গা তোলা বড়ুয়ার বি « get up, you good man's daughter » [Jñānadāsa]; দুধ তোলা « to vomit milk, to feign young ».

তোতান ভাতান « to soothe by feeding and with sweet words or with gifts ».

তাড়ান « to drive out » : কুলোর বাতাস দিয়ে তাড়ানো « to fan out with the winnowing basket, *i.e.*, to get rid of a pest »; ঝেঁটিয়ে তাড়ানো « to drive out beating with a broom ».

থাকা « to stay, to remain » : জাতজন্ম না থাকা « not have ceremonial purity intact »; অমুকের সঙ্গে থাকা « to live in adultery with N.N. » [this idiom is found even in Mahārāṣṭhrī Prakrit; and occurs also in M.B., *e.g.*, সব গোপীগণে মোরে কলঙ্ক তুলিঅঁ দিল রাধিকা কাহ্নাঞি' সঙ্গে আছে « all the Gopīs have raised this scandal against me that Rādhikā is in illicit connexion with Kṛṣṇa »—Śrīkṛṣṇakīrttana]; সাতে পাঁচে না থাকা « not to have any concern with »; হায়া পিত্তি না থাকা « not to have a bit of shame »; লজ্জা রাখতে ঠাঁই না থাকা « to have no place to hide shame; to be put to the greatest shame ».

দেওয়া « to give » : অমুক কেটে' গাল দেওয়া « to speak ill mentioning N. N. »; কুলে কালি দেওয়া « to disgrace the family by misconduct »; দিষ্টি (দৃষ্টি) দেওয়া « to give a poisoning look », *e.g.*, না জানি পাপ দিঠি দেয়ল কেহ « I guess somebody has directed an evil eye » [Govindadāsa]; নজর দেওয়া, the same; মাথার দিবি দেওয়া « to swear by the head »; মুখে ওলোক দেওয়া « to keep the mouth tight, *i.e.*, to be silent »; ষেটের কোলে অমুক মাসে পা দেওয়া « to be of so many months (spoken of children) »; শত্রুর মুখে ছাই দেওয়া « to give ashes to the enemies to eat »; সঁপে' দেওয়া « to hand over to be taken particular care of »; মুখনাড়া দেওয়া « to taunt »; হাতে টুকনী দেওয়া « to give a beggar's bowl in the hand » [pejorative]; পেটে স্থান দেওয়া « to bear (a child) »; হাঁড়ীতে স্থান দেওয়া « to maintain, to offer permanent boarding »; হাতে তুলে' কিছু দেওয়া « to offer something out of pity or affection »; উড়িয়ে পুড়িয়ে দেওয়া « to squander away (property, money) »; কুলে আগুন দেওয়া « to

disgrace the family with misconduct », *e.g.*, সতী কুলবতী কুলে জালি দিলি আগি « you were a chaste girl of a good family; you have now disgraced the family »; কুলে ছাই দেওয়া, the same, *e.g.*, বার লাগি কুলে দিখু ছাই « for whom I have disgraced the family » [Jñānadāsa].

দেখানো « to show » : দরদ দেখানো « to profess pity or compassion » [pejorative].

ধরা « to hold » : গতরে পোকা ধরা « to have one's body worm-eaten, *i.e.*, to be inactive » [pejorative]; ছুরার ধরা « to pray fervently to a god ».

ধোয়া « to wash » : গা ধোয়া « to have a bath, to toilet ».

নাওয়া « to bathe » : সাতসরুবে দিয়ে নাওয়া « to take seven mustard seeds and bathe, *i.e.*, to be relieved ».

নাড়া « to move, to shake » : কুটো নাড়া « to do the smallest duties » [pejorative].

পড়া « to fall » : মাটিতে পা না পড়া « not to tread the earth, *i.e.*, to be extremely puffed up »; জ্বালায় পড়া « to be worried »; বাড়া ভাতে ছাই পড়া « to have ashes fall over rice served, *i.e.*, to be greatly disappointed »; অমুকের হাতে পড়া « to be married to N.N. » [pejorative]; অমুকের কপালে পড়া, the same, *e.g.*, সাপুড়ের ভুতুড়ের কপালে পড়িলে « you have fallen to the lot of (*i.e.*, married to) a snake-charmer, a necromancer » [Bhāratacandra, Annadāmaṅgala]; মুখে ফুলচন্দন (<চন্দন) পড়া « to be thrice blessed »; পায়ে পড়া « to fall at the feet, *i.e.*, to crave pardon »; হাতে কড়া পড়া « to have corns in the palm » [pejorative], *i.e.*, কড়া পড়িয়াছে হাতে অন্নবস্ত্র দিয়া « you have supplied me with food and raiment so plentifully that I am afraid you have got corns in your palms » [Bhāratacandra, *ibid*].

পাওয়া « to get » : পুয়ে পাওয়া « to be sickening (for an infant), (believed to be due to evil spirits) », *cf.* M. I.A., *puā, puāinī* « a woman seized by a spirit »; মন পাওয়া « to secure approval ».

পাতা « to fell » [MB] : কান পাতা [also modern Bengali] « to pay heed to », *e.g.*, কাহাঞির বোলে কেহে পাতসি কানে « why do you listen to Kṛṣṇa's words? » [Śrīkṛṣṇakīrtana]; কথা পাতা « to begin a topic », *e.g.*, আন বুলিতে আন পাতসি কথা « you talk of a thing,

when you mean another » [*ibid*]; কচাল পাত « to talk impudently », *e.g.*, কচাল না পাত তোমো শুণ হে মুরারী « listen to me, Murārī, do not talk impudently » [*ibid*]; বগড় পাত « to speak high words », *e.g.*, মিহাই বগড় পাতে আছিদের কাহ « the clever Kṛṣṇa speaks harshly without any cause » [*ibid*]; জঞ্জাল পাত « to cause inconvenience, to offer resistance », *e.g.*, গোআলিনী রাধা পাতে আশেষ জঞ্জাল « the milk-maid, Rādhā, causes much obstruction » [*ibid*]; না পাত জঞ্জাল এবঁ জাওঁ বৃন্দাবন « do not be on the way, now I go to Vṛndāvana » [*ibid*]; মায় পাত « to cause illusion, to dupe » [*ibid*]. In Bhāratacandra the verb পাড়া « to fell » is used in this way, *i.e.*, লোচন-খাকী প্রমাদ পাড়িল « the cursed woman has done ill » [Vidyāsundara].

পাত « to spread out, to fell »: আড়ি পাত « to eavesdrop, (used only of women) ».

পাতানো « to cause to spread out »: সহ পাতানো « to make formally friends with ».

পোয়ানো « to bask »: বাকি পোয়ানো « to take the trouble ».

ফেরা « to turn »: কপাল ফেরা « to have a turn of good luck », *e.g.*, কপাল যদি আবার ফিরে যায় « if there be a turn of good luck » [Rabindranath, Kṣaṇikā].

ফেলা « to let fall, to throw away »: চোখের জল ফেলা « to shed tears »; হাতের লক্ষ্মী পায়ে ফেলা (বা ঠেলা) « to kick with the foot the fortune on hand, *i.e.*, to throw away a good opportunity », *e.g.*, হাতক লহিমী চরণ পরে ডারনু « I threw off at my feet the fortune on my hand » [Govindadāsa].

ফোটা « to blossom »: বিয়ের ফুল ফোটা « to have the time of marriage arrived ».

বলা « to speak »: ঠেস দিয়ে কথা বলা « to make cutting remarks, to taunt ».

বসানো « to cause to sit »: কেঁদে' হাট বসানো « to cry very much aloud ».

বাঁচা « to live »: হেসে (কেঁদে) না বাঁচা « to die of laughing (crying), to be amused (to be sorry) ».

বাঁটা « to pound, to distribute »: কু বাঁটা « to speak evil of », [pejorative].

বাসা *to think* [MB] : লাজ বাসা *to feel shame*, *e.g.*,
এ বোল বুলিতেঁ কাহ্নাঞি মুখে লাজ বাস *do not feel shame, Kṛṣṇa, to
utter these words?* [Śrīkṛṣṇakīrttana]; লাজ না বাস বুলিতেঁ হেন
বচনে [*ibid*]; হেদে হে নিলাজ বঁধু লাজ নাহি বাস *O you shameless
dear, do you not feel shame?* [Candidāsa]; পর বাসা *to think
as an outsider, *i.e.*, to be distant and formal*, *e.g.*, যাহারে মরমি
কহি সে বাসয়ে পর *he whom I consider as my sympathiser, treats
me with indifference* [*ibid*]; দুখ বাসা *to feel sorry*, *e.g.*, হেরে
বাসি দুখ *on seeing (him) I feel sorry* [*ibid*].

বাঢ়ানো, বাড়ানো *to cause to grow* [MB] : নেহা বাঢ়ানো *to
make love*, *e.g.*, নান্দের নন্দন কাহ্ন বশোদার পো তার সমে নেহা
বাঢ়ায়িলো *Kṛṣṇa, the son of Nanda and Yaśodā, with him I have
made love* [Śrīkṛṣṇakīrttana]; ভরমহি তা সঞে লেহ বাঢ়াওলি জনম
গোঁয়ায়বি রোয় *under an error you have made love to him :
you would have to shed tears as long as you live* [Govinda-
dāsa]. প্রেম বাঢ়ানো, the same, *e.g.*, গোপতে বাঢ়ায়ে প্রেম আপনা
খোয়ানু *I am lost as I have made love in secret* [Balarāma-
dāsa].

ভাঙ্গা *to break* : হাটে হাঁড়ী ভাঙ্গা *to break the cooking pot
at the market place, *i.e.*, to give out home secrets*.

ভাজা *to fry* : মাছের তেলে মাছ ভাজা *to pay one in one's own
coin, to be very niggardly*.

ভাবা *to think* : হু (কু) ভাবা *to think well (evil) of*.

মরা *to die* : ভেবে মরা *to be very anxious*; কেঁদে মরা *to
weep bitterly*; হেসে মরা *to have a good laugh*; লজ্জায় মরা *to
be very much put to shame*. This idiom has become current in
poetic literature, *e.g.*, মরিস্নে আর মিথ্যে ভেবে' *do not be worried
unnecessarily* [Rabindranath, Kṣanikā].

মানা *to admit* : ঘাট মানা *to crave pardon*.

যাওয়া *to go* : গা জ্বলে' যাওয়া *to smart, to be angry* [pe-
jorative], পেটে ভাত জল হ'য়ে যাওয়া, পেটের মধ্যে হাত পা সঁধিয়ে যাওয়া
to be extremely frightened.

যোড়া *to join, to begin* : কান্না যোড়া *to set up a cry* [also
MB], *e.g.*, কিসক নাগরী রাখা যোড়সি কান্দনে *why do you begin to
cry, my lady Rādhā?* [Śrīkṛṣṇakīrttana].

রাঁধা « to cook » : বুধে ভাত রাঁধা « to cause the greatest inconvenience or trouble ».

লাগা « to catch » : আগুন লাগা « to catch fire, i.e., to be cursed » (generally used with such words as কপাল, মুখ, হাত, etc); হাড়ে বাতাস লাগা « to be relieved » [pejorative]; ঐঁড়ে লাগা « to have two issues in quick succession and the consequent sickness of the first child ».

সওয়া « to tolerate » : ধর্ম্মে সওয়া « to be tolerated by God ».

সাধা পাড়া « to cajole and to prevail ».

হওয়া « to be, to become » : চিনি খেয়ে' মেনি হওয়া « to be pampered with excessive indulgence » [pejorative]; খেয়ে' দেয়ে' হাতী হওয়া « to be doing nothing but eat and drink » [pejorative]; নষ্ট হওয়া « to misconduct »; বড় মুখ ছোট হওয়া « to receive unexpected rebuff »; হন্তে হওয়া « to run amuck »; হাড় মাস কালি হওয়া « to be extremely worried or persecuted »; হাড় মাস ভাজা ভাজা হওয়া, the same; দু' হাত এক হওয়া « to be married (safely) »; পেট হওয়া « to conceive, to become *enciente* » [pejorative].

CHAPTER XII

Verbal Tabu : Euphemism

Bengali women are not allowed to mention the name of their husbands and that of their parents and seniors. The wife generally uses the third personal denominative pronouns, e.g., উনি « he yonder », তিনি « he », and also the words বাবু « Mister », কর্তা « master (of the house) », to designate her husband. For others she uses the respective relation words.

Euphemistic words.

বাড়ন্ত increasing, i.e., wanting », as in চাল বাড়ন্ত « no rice at home ». A negative word is considered inauspicious. So ভাত বাড়া « to serve rice for dinner ». This idiom occurs in M. I.-A.

(Pali), *e.g.*, *unha-bhattam baddhetvā* 'having served hot rice for dinner' [Ucchiṣṭabhakta Jātaka].

শিখলানো 'to loosen' > to remove a bracelet of a married woman'. The verb খোলা or খুলে নেওয়া 'to take off' is not used as that might imply widowhood (widows wearing no bracelets).

আসি 'to come' > to go (on a sojourn)'. Mothers and matrons never speak যাও 'go' to a near and dear person, but would say এস 'come (again)'. This idiom has intruded into men's speech as well. In polite leave-taking the departing visitor says আমি তবে আসি 'let me now come, *i.e.*, I am off now', to which the other party replies আচ্ছা আস্থন 'well, come (again)'. MB. মেলানি, মেলানী 'adieu, parting <meeting'.

Bengali ladies, if so minded, refuse alms to beggars by saying হাত যোড়া 'hands engaged' instead of uttering the inauspicious negative particle.

Several animals, either ferocious and venomous, are not at all named at night. Thus a tiger is mentioned as পোকা 'a vermin', a snake as লতা 'a creeper'. A bat is also not named at night for fear that if it hears its name mentioned every fruit will taste bitter to it. It is mentioned as রাত চরা 'a night-rover'. This peculiarity is now confined to village women only.

CHAPTER XIII

Bengali : Vocative Particles and Exclamations

1. Vocative Particles.

Vocative particles are in much use among Bengali women in intimate talk, and in falling foul of each other. The following are in use in Modern Bengali, but these are seldom used by educated women.

ওলো, হ্যালো, হ্যাঁলা—these are terms of address between equals in age and implying familiarity and intimacy, also used by superiors to the inferiors. These are also used as pejoratives. Cf. M. I.-A. *halā*. The vocative ওটে occurs in Carey.

The shortened forms -লো, -লা of the above are used only at the end of the sentence, e.g., তুই আর না লো ‘you come along’; তুই যাস্নি কেন্ লা ‘why did you not go?’. The forms ল and আল occurs in the Śrīkṛṣṇakīrtana. The form -টে occurs in Carey and is also now current in Birbhum district.

বোন, বুন (dialectal) ‘sister’—these terms of address are used between equals (not girls). These are now confined to village women and are gradually getting obsolete. The word ভাই ‘brother’—which evidently comes from men’s vocabulary is now fast replacing ওলো, হ্যালো, বোন, etc.

দিদি [‘elder sister’] is the term for respectfully addressing one who is older in age than the speaker.

2. Exclamations.

মা, ওমা ‘O mother’—expressing surprise.

আহা ‘ah!’—expressing mild protest, contempt or depreciation.

আই আই—expressing regret or surprise, now obsolete in Modern Bengali.

ছাই ‘ashes!’—expressing contempt or depreciation.

খন্টি ‘blessed!’—denotes surprise.

বালাহি [Perso-Arabic]—‘(may Heaven avert) the calamity!’.

ষাট্ ‘sixty, i.e., may you live for sixty years!’. This is uttered by mothers or matrons when a child sneezes or something evil is mentioned.

জীব [<O. I.-A. *jīvatu*] ‘live, may you live long!’. This is uttered by mothers or matrons when a child or dear person of younger age sneezes. At one time this custom prevailed among men also in Ancient India,—as we know from the Garga Jātaka [Jātaka, 155]. He who was thus accosted—as we learn from the above source—also had to reply *jīva* ‘may you live

(long)! », or *ciram jīva* « may you live long! ». Among Jugo-Slavs we have the same custom, as in Bengal, of saying *zivote* « may you live (long)! » [cf. O. I.-A. *jīvata*], to a person who sneezes.

3. Exclamatory phrases and expressions.

অবাক্ ক'রলে « strange indeed! ».

আ মরি « I am undone! » [pejorative].

আ মরণ « get away! »

ও হরি « O (my) God! »—denoting surprise.

কি গেরো « what a fix! »—denoting worry and indignation.

কি লজ্জা « what a shame! »

কি ঘেন্না « what a shame! »

কি হবে « what is to be done! »—denoting worry, surprise, etc.

কথার ছিরি দেখ « look at the style of her (or his) speech! » [pejorative].

পোড়ার দশা আর কি « wretched! » [pejorative].

মরণ আর কি « wretched! » [pejorative].

মরি কি রূপ « what a beauty! » [pejorative].

যাব কোথা « where am I to go! »—denoting utter surprise.

লক্ষ্মীটি « my tiny Lakṣmī! »—addressed to a child or a dear person expressing mild persuasion.

লক্ষ্মী ধন আমার « my treasure! »—used as above.

সাত দোহাই তোমার « I call on you seven times for mercy! »—used as above.

মাথা খাও « eat my head! »—expressing mild persuasion, protest, etc.

মা গো « mother mine »!—expressing abhorrence, fear, etc.

4. Terms and expressions of blessing a married woman by a woman.

পাকা চুলে সিঁদুর পর « may you paint vermilion on your forehead even when your hairs are grey! »

হাতের নোয়া ক্ষয় যাক * may your iron bracelet wear out on your wrist! *—the above two expressions imply * may your husband live till you get old and die! *

ধনে পুত্রে লক্ষ্মী লাভ হোক * may you prosper in wealth and children! *

নাইতেও যেন একগাছি চুল না ছেঁড়ে * may not even a single hair (of your head) fall off during bath, *i.e.*, may you not incur even the slightest injury! *

CHAPTER XIV

Bengali : Personal Names

Women are generally responsible for naming their children. Some of the proper names in Bengali—which were in the past very common ones but are now deemed unfashionable—originated with women. These names are now mostly restricted to village people. It be would of interest to discuss them here.

After a series of girl-children the disgusted mother names her youngest as আন্নাকালী < আর না কালী * no more (of them), O Kālī *—[this being generally abbreviated into আনী or আনু],—or as থাকমণি * stop, (my) jewel! *—[sometimes simply থাক * stop! *],—or as মানা * prohibition *.

A girl-child after three successive boy-children or a boy-child after three successive girl-children is named শৈল < মহিল * it is tolerated, *i.e.*, it would live (long) *. The paletal *ś* is due to the influence of *tatsama* names like শৈলবালা, শৈলেন্দ্র, etc.

The son of a mother whose earlier children died very young is named—এককড়ি, দোকড়ি, তিনকড়ি, পাঁচকড়ি, ছকড়ি, সাতকড়ি or নকড়ি, implying that the child has been ransomed from Yama with so many cowries. Similarly—কেনারাম * Rām the bought back *, বেচারাম * Rām the sold (to Śaṣṭhī, the guardian deity of children) *, রাখহরি * keep him alive, O God! *, ষষ্ঠীচরণ * Feet of

Ṣaṣṭhī », ষষ্ঠীবর « Boon of Ṣaṣṭhī ». So also children that are born after prayer to a God are named after the God, e.g., তারকচন্দ্র, পঞ্চানন, বৈষ্ণনাথ, etc.

Children are often nicknamed after foul things, so that they might repulse Yama, e.g., গুয়ে, গোবর, etc. We know from the Caitanyacaritāmṛta that Caitanyadeva was given the nickname *Nimāi* on thought that evil spirits might spurn him, নিম being a very bitter fruit [ডাকিনী শাকিনী হৈতে শঙ্কা উপজিল চিতে ডরে নাম খুইল নিমাই].

The etymology of Umā's name, as given by Kālidāsa, should be mentioned : *umeti mātrā tapaso niṣiddhā paścād umā-khyām sumukhī jagāma* « as that lovely-faced girl was requested not to do austerities by her mother saying *u mā* [« oh no! »], she was afterwards known as Umā » [Kumārasambhava].

CHAPTER XV

Bengali : Proverbs

Bengali women—especially those who belong to the lower classes—are remarkably fond of spicing their talk with all sorts of broken verses and proverbs. These are called ছড়া (a string) and speaking them is known as ছড়া কাটা (to spin verses). In their quarrels, too, Bengali women are apt to quote series of verses and sayings; and a quarrel of this type is popularly known as ছড়া কেটে' গাল দেওয়া.

These proverbs are concerned with woman's own peculiar province, that is, her own people, her own household, and her own neighbours. The exceptional relation between mother and her child has been emphasised in a good number of them. Not a few of them glorify the mother above all other relations. A great number of them reveal the cruel tortures of newly-wed

girls, snatched from the bosom of their loving parents and transplanted to distant and unsympathetic homes. The *বরজামাই* (son-in-law residing with his wife's people) is a standing figure of ridicule; and the co-wife, together with petty domestic jealousies, is constantly reminded. The neighbours—especially the womenfolk—are the worst enemy, to baffle whom the greatest care and anxiety is shown in not a few proverbs.

Simile is the most conspicuous figure of speech, the objects of which are all to be found in the homestead and its compounds. A Bengali home in a village in Bengal is peeping through them all, and the bulk of them smell of the kitchen and cakes. Some of these proverbs may possibly have some historical background, which, at the present stage, is hardly possible to restore.

The proverbs which have been collected here are typical and fairly exhaustive. They have been classified according to the subject-matter, which would be found convenient.

At the end of this chapter some instances have been given showing that the Vaiṣṇava lyrics of Mediaeval Bengal contain not a few of proverbs used by women of those days, and some of which are still current in Modern Bengali.

It is quite possible that some of these popular maxims may be traced as far back as the early or the middle Middle Indo-Aryan period. We have also seen before that proverbial sayings were not unknown in Middle Indo-Aryan. Thus the Bengali proverb—*জামাইয়ের জন্যে মারে হাঁস । গুটি শুদ্ধ খায় মাস ॥* 'they kill a duck for the son-in-law while they all eat it together'—has its affinity with—*jāmātrartham śrapitasya sūpāder atithyupakāratvam* 'soup that has been cooked for the son-in-law is useful for the guest as well' [Jacob, *Laukikanyāyāñjali*, Vol. ii]. The Pandits of Bengal sometimes Sanskritized these proverbs. Thus—*cāle phalati kuśmāṇḍam harimātur gale vyathā* has been translated literally from Bengali *চালে ফলে কুমড়ো হরির মায়ের গলায় ব্যথা* 'pumpkin grows on the thatched roof while Hari's mother has her throat inflamed'.

(A) Regarding the worthlessness and vileness of the daughter-in-law :

অকেজো বউ লাউ কুটুতে দঢ় • An idle daughter-in-law is but an expert in slicing gourd •.

অকাজে বউড়ী দঢ় • The daughter-in-law-folk are expert in misdeeds •. Cf. Hindi : *aile kul ke agrō dīyā butaile sagarō* • the girl came to the family and put out all the lamps •.

একে বউ নাচনী । ভায় খেমটার বাজনী ॥ • As much as the daughter-in-law is given to dancing, add to it, there is music in *khemtā* style •. Cf. একেই নাচনী বুড়ী ভায় আবার নাভনীর বিষে *infra*.

কলির বউ ঘরভাঙ্গনী • The daughter-in-law of to-day is a disruptor of the family •.

কাজকস্মে নেই ঠাকুরবি ।

চেপে' চেপে' ভাত বেড়ো আমি বালশ পোয়াতী ॥

• Sister-in-law mine, I am not for household duties; forget not to serve me meal in plenty, as I am the mother of an infant •.

পান সাজতে জানে না, ছু'পায়ে আলতা প'রেছে • She does not know how to prepare betel, but has painted both her feet crimson •.

বউ গিল্লি হ'লে তার বড় ফরফরানি ।

মেঘভাঙ্গা রোদু'র হ'লে বড় চড়চড়ানি ॥

• If the daughter-in-law becomes the mistress of the house, her hustling becomes awful; just as, sunshine, immediately after clouds are dispersed, becomes tremendously keen •.

বউয়ের চলন ফেরন কেমন । তুর্কি ঘোড়া যেমন ॥

বউয়ের গলার স্বর কেমন । শালিখ কৈঁকায় যেমন ॥

• 'How is the daughter-in-law's walk and gait?' 'Much like that of a Turkish horse.' 'How goes her voice?' 'Much like the quack of a *Sālikh*' •.

বউ নয় বোবা । বউ নয় বাবা ॥ • (When first coming to her husband's home) the daughter-in-law, is she dumb? (A few years after) the daughter-in-law, is she the father of the family? •.

মিড়মিড়ে পিদিম, আর বিড়বিড়ে বউ • A dull light and a slow-handed daughter-in-law (are equally good for nothing) ».

যা' ভাব তা' নয়, বউয়ের পেটে পিলে • (A very jealous mother-in-law, when congratulated by a neighbour on the immediate prospect of her getting a grand-child, said to her neighbour :) 'Not so as you may think : my daughter-in-law has got an enlarged spleen' ».

যেমন দাদা গুণমণি । তেমনি বউ রাসমণি ॥ • As my brother is a paragon of virtues, so, indeed, is his wife a dancing jewel ».

লাজে বউ ভাত খান্না, চাল্‌তা হেন গ্রাস • The daughter-in-law can hardly partake of her dinner, while her gobbles are so big as *chālta* fruits ».

শুন ভাই কলির অবতার ।

কোনের বউড়ী বলে ভাতার ভাতার ॥

• Listen, sister, about the evils of Kali (the modern evil days),—the daughter-in-law of the corner (*i.e.*, recently married) talks of 'my husband,' 'my husband' ». Newly-married daughters-in-law are proverbially shy. They are known as ক'নে বউ (<*kanyā vadhū*), and generally occupy a corner (কোণ) of the sitting room. There is apparently a pun in কোনে.

সকল দিন যায় হেসে' খেলে' ।

সন্ধ্যা বেলা বউ কাবাস ডলে ॥

• The whole of daytime is spent in gay sports : the daughter-in-law separates cotton from seeds at nightfall ». Cf. অকেজো বউ লাউ কুটতে দড়, *supra*.

পেই কড়ি ক্ষয় । তবু বউ সুন্দর নয় ॥ • So much money spent, yet the daughter-in-law is not handsome ».

(B) Regarding the co-wife :

অভিমাত্রী ছয়ো । নেটি পেটি স্কয়ো ॥ • The perverse wife becomes neglected, while the officious one becomes beloved ».

অশথ কেটে' বসত করি । সতীন কেটে' আল্‌তা পরি ॥ • Let me cut down an *Aśvattha* (the religious fig) tree and build my residence there : let me kill my co-wife and paint my feet with her gore ».

আন্ মাগীর আন্ চিন্তে । দুয়ো মাগীর ভাতারের চিন্তে ॥

• The other woman has other cares, but the neglected co-wife thinks only of her husband •.

আন্ সতীনে নড়ে চড়ে । বোন সতীনে পুড়িয়ে মারে ॥ • An other co-wife handles roughly, but the co-wife, who at the same time is a sister, burns her alive •.

এক চির পান দু'চির হ'ল : সোনার সিংহাসনে ভাগ ব'সল ॥ • One betel leaf has been torn into two : there is a fresh share to the golden throne •.

এক বরের স্ত্রী হেলা দোলা । দোজবরের স্ত্রী গলার মালা ॥ • The first (and the only) wife of a man is not much cared for, but the second wife of a man is prized like a wreath of flowers •.

খেটে' খেটে' ম'বুল দোরাগী । হাত নেড়ে' প'রুহুল সোরাগী ॥ • The neglected queen dies of hard work, while the beloved queen has given birth to an infant by sheer waving of hands •.

জ্বালা দিতে নেই ঠাঁই । জ্বালা দেয় সতীনের ভাই ॥ • There is no source (left) for fresh miseries : even the co-wife's brother tortures (me) •.

দিন গেল হেলা ফেলায় । রাত হ'ল সতীনের জ্বালায় ॥ • The day is passed in doing nothing, the night in co-wife's tortures •.

দুই সতীনের রান্না । ঘরের গিন্নি ভাত পান না ॥ • There are two co-wives to cook, but the mistress of the household gets no meal •.

ভাতার যমকে দিতে পারি তবু সতীনকে দিতে পারি না । • The husband can be suffered to die but not to be given over to the co-wife •.

বে নারী সতীনে পড়ে । তারে বিধি ভিন্ন গড়ে ॥ • The girl who has a co-wife, has been fashioned differently by God •.

সতীনের চেয়ে সতীনের কাঁটা মন্দ । • The pricks (i.e., children) of the co-wife are worse than herself •.

সতীনের বাটিতে গু গুলে খাওয়া । • To mix up night-soil in co-wife's cup and drink it •. Cf. • cutting of the nose to spite the face •.

সাত সতীনে নড়ি চড়ি । বেড়া আগুনে পুড়ে মরি ॥ • We, the seven co-wives, move about : let us die in a circle of fire •.

হুয়ো যদি নিম দেয় তিনি হন চিনি ।

দুয়ো যদি চিনি দেয় নিম হন তিনি ॥

‘ If the beloved co-wife gives *nim* (a very bitter fruit) it tastes sweet, but if the neglected co-wife serves sugar it tastes (bitter) like *nim* ’. This verse occurs in the poem “ *Mānasimpha* ” of the poet Bhāratacandra.

সোনা দানা দুধের বাটি । দুয়ো মেগের গুঁচলা মাটি ॥ ‘ Gold and jewels and nice food (for the beloved co-wife), but the neglected one gets only dirty earth ’.

(C) **Ridicules on the son-in-law residing with his wife’s parents :**

আগে জামাই কাঁঠাল খান না । শেষে জামাই ভোঁতাও পান না ॥ ‘ At first the son-in-law would not eat jack-fruit, but at last he does not get even the rejects ’.

বাইরের জামাই মধুসূদন, ঘরের জামাই মোধো ।

ভাত খাওসে মধুসূদন, ভাত খেসেরে মোধো ॥

‘ The son-in-law from outside is Mr. Madhusudan, and the son-in-law at home (of the girl’s parents) is merely Modho (a familiar and vulgar abbreviation of Madhusudan); (when announcing that dinner is ready, the former is accosted), ‘ please come and take your dinner, Mr. M., ’ (but the latter is addressed), ‘ come and eat thy fill, you Modho. ’ ’ Cf. Hindi : *bhassakkar ke damād ko bhāt hi mithāi* ‘ rice is a sweetmeat to the son-in-law of a glutton ’.

যাচলে জামাই খান না । শেষে আমনিও পান না ॥ ‘ The son-in-law refuses to take his meal when requested; at length he does not get even gruel of stale rice ’. Cf. আগে জামাই কাঁঠাল খান না, etc., *supra*.

যাচলে জামাই না খান পিঠে । না যাচলে মরেন টেকশাল চেটে ’ ॥ ‘ If asked the son-in-law does not eat cakes : when unasked he has to content himself with licking the floor of the husking shed ’.

যা’ ছিল আমনি পাস্তা মায়ে বিয়ে খেলুম ।

ঘর জামাই রামের তরে ধান গুঁকোতে দিলুম ॥

‘ Whatever stale rice and gruel was left overnight, we, the mother and the daughter, have taken, and for Rām, the son-in-law residing (with us), we are sunning paddy ’.

(D) Regarding partiality for wife and her people :

আজকের মাগ তুমি, রেঁধো না রেঁধো না ।

চাল চিবিয়ে খাব আমি, ভেঁবো না ভেঁবো না ॥

• You are my newly-wed wife, do not you go to the kitchen; you need not worry for me, for I shall chew raw rice •.

আপনি থাকতে নেই ঠাই । বউয়ের সঙ্গে সাতটা ধাই ॥

• He has not a roof to rest under while his wife has seven attendants •.

আপনার বোন খেতে পায়না, শালীর তরে মোণ্ডা • His own sister lacks bread, while he sends sweetmeat to his sister-in-law •.

কলির কথা কই গো দিদি কলির কথা কই ।

গিন্নির পাতে টক আমানি বউয়ের পাতে দই ॥

• I speak of the modern days, sister mine: to wit, the mistress of the house is served stale rice gruel while the daughter-in-law eats curds •.

নিজের বোন খেতে পায় না, শালীর তরে মোণ্ডা, see *supra*.

মায়ের পেটে ভাত নেইকো, বউয়ের চন্দ্রহার • The mother does not find food while the wife is presented with a jewelled girdle •.

মায়ে বিয়ালে মাগে পেলো, কার ধন কার • The mother bore (him), but the wife took possession (of him): lo! somebody's treasures belong to another •.

মায়ের গলায় দিয়ে দড়ি । বউকে পরায় ঢাকাই শাড়ী ॥

• Hanging the mother by the neck he dresses his wife in fine muslin •.

মায়ের পুত নয়, শাশুড়ীর জামাই • He is no son of his mother, but the son-in-law of his mother-in-law •.

সৎমা'র ভালবাসা পাস্তা ভাতে ঘি ।

মাখাটি মুড়ায় এস, তেল জল দি ॥

• The step-mother's affection is like pouring ghee in stale rice; she says, 'shave your head clean and come, let me anoint it with oil and pour water •.

(E) Mother's superiority over all others :

অনেক দুর্ভাগ্য বার বারে নেই মা ।

অনেক দুর্ভাগ্য বার নেই অন্ন ছাঁ ॥

« It is the greatest misfortune for one not to have mother at home, as well as food and residence ».

এ মা, ও মাসী । তবে কেন উপবাসী ॥

« Here is mother, and there is her sister (you say) : why do you then go without food ? ».

কিসের মাসী কিসের পিসী কিসের বৃন্দাবন ।

পথ পানে চেয়ে দেখ মা বড় ধন ॥

(মরা গাছে ফুল ফুটেছে মা বড় ধন ॥)

« What if mother's sister? What if father's sister?..... Look along the way (or the dead plant has put on blossoms), mother is the greatest blessing ».

চিঁড়ে বল, মুড়ি বল, ভাতের সমান নয় ।

পিসী বল মাসী বল মায়ের সমান নয় ॥

« You may count the different delicacies prepared from rice, but there is nothing like rice : you may talk of the mother's sisters or the father's, but none like the mother ».

পিসী বল মাসী বল, মায়ের বাড়ী নেই ।

পিঠে বল মিঠে বল, ভাতের বাড়ী নেই ॥

« You may talk of your parents' sisters but nobody excels mother : you may talk of cakes and sweetmeats, but nothing supersedes boiled rice ».

মা চায় আঁত পানে । মাগ চায় অঁচল পানে ॥

« Mother is solicitous for the health, but the wife is interested in the purse ».

মায়ের দয়া নেই, মাসীর দয়া. « No pity in the mother, but pity in the aunt ».

মায়ের চেয়ে দরদী বড় (or ভালোবাসে) তাকে বলে ডা'ন « She who is more compassionate than the mother is but a witch ».

হাটে মাঠে ঘুরে এলুম, ঘাটে নেই না ।

রণে বনে ফিরে এলুম, ঘরে নেই মা ॥

« I have walked through hills and dales, but there is no boat in the ferry : I have come back from battles and woods, but no mother waits (for me) at home ».

(F) Regarding worthless husband :

অবুঝকে বোঝাব কত, বোঝ নাহি মানে ।

টেকিকে বোঝাব কত, নিত্য ধান ভানে ॥

« How long should I explain a thing to one who would not understand : how long should I expostulate with the husking machine? It would go on husking paddy for ever ».

উপোসের কেউ নয়, পারণার গোসাঁই « He is no game for ceremonial fasting, but plays the religious father when breaking the fast ».

একাদশীর কেউ নয়, পারণার গোসাঁই, see *supra*.

এত ক'রে করি ঘর তবু মিন্সে বাসে পর « I run the household at so much pains, still my man treats me distantly ».

ওরে আমার তুমি । তোমার জন্তে চা'ল ভিজিয়ে চিবিয়ে মরি আমি ॥

« O you mine, I am sick of chewing soaked rice for you ».

কাজে কুঁড়ে খেতে দেড়ে । বচনে মারে পুড়িয়ে পুড়িয়ে ॥

« He is idle at work, but eats for two, while he burns me alive with his complaints ».

কুঁড়ে ভাতারের পাটকেল শিতান « A lazy husband gets a brick for a pillow ».

টেড়ে শাক সিদ্ধাব কত, হাবা ভাতারকে বোঝাব কত « How long shall I boil *dhôro* plant? How long should I explain to the idiot of a husband ».

দরবারে না মুখ পেয়ে ঘরে এসে মাগ ঠেঙ্গায় « Not finding an opportunity to speak at the court, he comes home and beats his wife ».

দরবারে হারিয়ে জামাই মাগকে ধ'রে মারে « Defeated at the court the son-in-law beats his wife ». See *supra*.

না দেখলে থাকতে নারি দেখলে কাটাকাটি « I cannot remain without a sight (of him), but a scuffle follows when we meet ».

পড়েছি দজ্জালের হাতে । জঞ্জাল জড়ায় দিনে রাতে ॥

« I have been married to a ruffian, and he sports in dirt day and night ».

পড়েছি মোগলের হাতে । খানা খেতে হবে সাথে ॥

« I have been married to a Moghul, so I must eat forbidden dishes with him ».

পান পান্ডা ভক্ষণ । এইতো পুরুষের লক্ষণ ॥

আমি অভাগী তপ্ত খাই । কোন দিন বা মরে যাই ॥

« To chew betel and to eat stale rice—this befits a man : I, a poor wretch, eat my dinner hot, lest I die someday ».

ভাত-কাপড়ের ভাতার নয়, নাক কাটবার গোসাঁই « He is nobody to find food and clothes, but is game for cutting the nose ». See উপোসের কেউ নয়, পারণার গোসাই, *supra*. Cf. Hindi : *khānā na kaprā saīt kā bhatrā*.

ভাত দেবার ক্ষমতা নেই, কিল মারবার গোসাঁই « He has no capacity for finding food, but is game for dealing fisticuffs ».

ভাত দেয় না ভাতারে । ভাত দেয় গতরে ॥

« Not the husband, but her own exertions find her food ».

মিন্‌সের যদি এত যজমান । মাগী কেন ভানে ধান ॥

« If the man has so many clients, why does his wife then go husking paddy? ».

যার কাছে ব্যবস্থা । সেই করে তিন অবস্থা ॥

« He who keeps order maltreats me ».

যার জন্তে কর্ণুম যো । সেই বলে পৈতানে শো ॥

« He whom I serve so faithfully asks me to lie at his foot-stool ».

(G) Regarding neighbours :

আটে কাটে দড় বড় শক্ত মেয়ে যেই ।

পাড়া-পড়শীর বুকে বসে ঘর করছি তেই ॥

« As I am a staunch woman and quite smart, I sit, as it were, on the chest of our neighbours and run the household ».

ঝি জব্দ কিলে, বউ জব্দ শিলে ।

পাড়াপড়্শী জব্দ হয় চোখে আঙ্গুল দিলে ॥

« A daughter can be taught a lesson with fisticuffs, and the daughter-in-law when set at the grinding-stone; but the neighbours can be quieted only when poked at their eyes ».

পড়্শী নয়, বড়্শী « No neighbour, but an angling hook ».

যার ভাতার তার ভাতার । কেঁদে মরে হরে ছুতার ॥

« Her indeed is the husband, whose husband he is, but the carpenter *Hari* dies of crying ».

যা'র ঝি তা'র জামাই । পাড়াপড়্শীর কাটনা কামাই ॥

« Whose the daughter, her the son-in-law, but the neighbours stop spinning (for the day) ».

না বিয়োল মা বিয়োল ঝি । ঝাল খেয়ে ম'ল পাড়াপড়্শী ॥ « Not the mother but the daughter begat the son, and the punjent dose is given to the neighbours ».

(H) Maxims :

অতি বড় ঘরনী না পায় ঘর । অতি বড় সুন্দরী না পায় বর ॥

« An ultra good housekeeper does not find a household : an excessively beautiful girl does not find a husband ».

অন্ন দেখে দেবে ঝি । পাত্র দেখে দেবে ঝি ॥

« Look for fine boiled rice before you serve ghee : find out a suitable bridegroom before you marry your daughter ».

অবাচন্তীর মান বাড়়া « An unbegging woman has the greatest prestige ».

আষাঢ়ে না হ'লে সূত হা সূত যো সূত ।

ষোলতে না হলে পুত হা পুত যো পুত ॥

« If yarn is not spun by the month of *Āṣāḍh* (May-June) there would rise a cry for it; if there is no issue even at the age of sixteen, there would be a cry for children ».

ইষ্টি কুটুম বাবা । সকল কুটুম টাকা ॥

« The father is the most welcome guest; all others can be bought over with money ».

এই ডুমুরের গরব কর। পাক্লে ডুমুর প'ড়ে মর ॥

* You praise the beauty of a fig : but when it ripens it drops down *.

এক ছেলে তা'র ফুলশয্যে। পাঁচ ছেলে তা'র কাঁটার শয্যে ॥

* She who has got an only son lies on a bed of flowers (as it were); she who has five, lies on a bed of thorns *.

এখন বুঝিলে না ঘোবনের ভরে।

তখন কাঁদিতে হবে অজ্বোর বারে ॥

* Now you do not take heed at the prime of youth, but later on you would have to shed tears in torrents *.

কড়ি দিয়ে খাব দই। গয়লানী আমার কিসের সই ॥

* I shall pay cash down and eat curds : wherefore must I call the milkmaid my friend *?

কাঁকে কলসী চড়ক পাক। গিন্নি হবার বড় সাধ ॥

* Always fetching water and always spinning like a top— (this is the duty of the mistress of the house) : have you still a great desire of becoming one *?

গতরের নাম পরশমণি * The name of activity is touchstone *.

গাই কিন্বে ঝাঁপড়ী। বউ আনবে ফেঁতড়ী ॥ * Buy a sleek cow : bring home a plain-looking daughter-in law *.

গাঙ্গে গাঙ্গে (or রাজায় রাজায়) দেখা হয়, তো বোনে বোনে দেখা হয় না * Rivers (or kings) may meet, but sisters do not *.

ঘরের গাছা, পেটের বাছা * The plant grown on the homestead and the child of womb (are equally dear) *.

চুল থাকে তো বাঁধি। গুণ থাকে তো কাঁদি ॥

* It is worth while to do up long tresses of hair, and to weep for one who is worthy *.

ছিঁড়ে ছিঁড়ে কাটুনি। পুড়ে বুড়ে রাঁধুনি ॥

* A spinner after spoiling much cotton : an expert cook after much burns and scalds *.

ছেলে নষ্ট হাতে। বউ নষ্ট ঘাটে ॥

* A boy is spoilt in the market place, a daughter-in-law at the bathing place *.

বিকে মেরে বউকে শিখান * To beat the daughter and teach the daughter-in-law a lesson *. Cf. Hindi : *apnī bēṭikō aisā mārī ki pōtōh trās kar jāē* * I would beat my daughter, that my daughter-in-law may learn to fear *.

তুফানেতে হাল ধরে না, সেই বা কেমন নেয়ে ।

কথা প'ড়লে বোঝে না, সেই বা কেমন মেয়ে ॥

* What sort of a sailor is he who does not hold the helm fast in a gale? What sort of a girl is she who does not catch the sense of a talk *?

নটিকে ব'ল না নটী । ধ'রবে এসে চুলের মুঠি ॥

* Do not call a dancing girl as such : she would come and catch you by the lock *.

ননদেরও ননদ আছে * The sister-in-law has also a sister-in-law of her own *. The sister (ননদ) is notorious for her ill-treatment to her brother's wife. Cf. প্রতি বোল ননন্দ বাছে * the sister-in-law (husband's sister) finds fault at every word * Śrī-kṛṣṇakīrtana, p. 344; ননদী বিষের কাঁটা । বিষ মাখা দেয় খোঁটা ॥ * the sister-in-law is like unto a poisonous thorn and pricks in poison incessantly * Caṇḍidāsa; etc.

নিকূলে চুকুলে ঘর । কামালে জামালে বর ॥

* A room looks fine when cleansed and washed : a bridegroom looks nice when he shaves and puts on (fine) clothes *.

পরের সোনা দিওনা কানে । কেড়ে নেবে হেঁচকা টানে ॥

* Do not wear other's gold ornament in your ears : the owner may take it away with a snatch *.

পায়ে-পড়াকে পারা ভার * It is indeed difficult to resist one who humbles himself at the feet *.

পাঁচ জনে খায় একলা মাগী । দশহাতে খায় ডোকলা মাগী ॥

* A single woman shares her food with others : a spendthrift woman gobbles with ten hands, as it were *.

পান্ডা ভাতে ঘি নষ্ট । বাপের বাড়ী ঘি নষ্ট ॥

* Ghee is spoiled when served on stale rice : a daughter is spoiled if she stays at her father's place for long *.

পরের কথায় লাথি চড় । নিজের কথায় ভাত কাপড় ॥ * If one thinks of other's affairs he gets kicks and fisticuffs; if he minds his own business he finds plenty *.

পিরীত যখন জোটে । ফুট কলাই ফোটে ॥

পিরীত যখন ছোটে । টেকিতে ফেলে কোটে ॥

* When affection appears, it gushes like peas frying : when it goes out, one is pounded, as it were, in the husking machine *.

পুতের মুতে কড়ি * Even the urine of a son brings money *.

পেটের বাছা বাড়ীর গাছা, see *supra*.

বাপ গুণে পো, মা গুণে ঝি * Son inherits his father's qualities : daughter, of her mother *.

বন পোড়ে সবাই দেখে, মন পোড়ে কেউ দেখে না * When a forest is burnt down it catches the notice of everybody; but nobody takes the slightest notice when one's heart burns in anguish *.

Cf. বন পোড়ে আগ বড়াই জগজনে জানী ।

মোর মন পোড়ে যেন কুস্তারের পণী ॥

* When fire burns a forest down it becomes manifest to the whole world : but my heart burns slowly like the oven of a potter * Śrīkrṣṇakīrtana, p. 294.

বিধি যদি করে মন । পুত বিয়োতে কতক্ষণ ॥

* If Providence so minds, a son may be born in no time *.

ভাইয়ের ভাত, ভাজের হাত * Brother finds food, but its serving lies with his wife *.

ম'রবে মেয়ে উড়বে ছাই । তবে মেয়ের গুণ গাই ॥

* Not until a woman dies and her ashes are scattered away, she would be praised for her virtue *.

মেয়ে মানুষের বাড়, না কলা গাছের বাড় * The growth of a girl is as rapid as that of a bannana plant *.

মায়ে ঝিয়ে কৌদল কৌদল নয় ।

সকালের বাদল বাদল নয় ॥

* It is a sham quarrel when a mother and her daughter fall out : a morning shower is no rain *. Cf. Hindi : *mā bēṭiṣ mē*

larāi huī lōgō nē jānā bair parā « the mother and the daughter quarrel and people think them enemies! ».

মেয়ে ছেলে কাদার ডেলা । ধপাস্ ক'রে জলে ফেলা ॥

« A girl child is like a lump of clay, only fit for dropping into water with a splash, i.e., a girl is married down and lost to her parents ».

মেয়ের মায়ের পাঁচটা প্রাণ « Mother of a girl has five vitals; i.e., she has got to digest so much insults and taunts from her son-in-law's people that she must possess wonderful patience ».

যতদিন দুধ, ততদিন পুত « As long the son is fed at his mother's breast, so long is he his mother's alone ».

যারে যেমন গ'ড়েছে বিধি । সেই ভাতারের পরম নিধি ॥

« However a girl might be fashioned by the Creator, she is but her husband's darling ».

যে রাঁধে সেকি চুল বাঁধে না ? « Has she not got to cook the meal, who dresses up her hair »?

যেমন হাঁড়ী তেমন সরা (or বিঁড়ে) « Like pot, like lid (or stand) ».

Cf. Hindi : har dēgī camcā « a spoon for every pot ».

রাজার রাণী, কানার কানী « Queen to a king : an one-eyed darling to an one-eyed fellow ». *Cf. যারে যেমন গড়েছে বিধি etc., supra; English : every jack has his jill.*

লক্ষ্মীছাড়ার দাঁতে বিষ « A luckless fellow has a foul tongue ».

লক্ষ্মীছাড়ার ভক্ষি বেশী « A luckless fellow is a voracious eater ».

লোহা জব্দ কামার বাড়ী, বউ জব্দ শ্বশুরবাড়ী « Iron suffers at blacksmith's shop, and daughter-in-law at her husband's place. »

শশা খেয়ে জলকে টান । তেমনি ভায়ের বোনকে টান ॥

চিনি খেয়ে জলকে টান । তেমনি বোনের ভাইকে টান ॥

« As there is no inclination to drink water after eating cucumber, so, indeed, a brother has little affection for his sister. But as one drinks water after eating a sweet dish, so, indeed, does a sister hanker after her brother's welfare ».

সকলেই তো মেয়ে ।

কেউ যাচ্ছে পাল্‌কী চ'ড়ে, কেউ র'য়েছে চেয়ে ॥

« All of us are women : but some ride in palanquins, while others look along ».

সখি লো সখি । আপনার মান আপনি রাখি ॥

« My friend, one has to keep her own prestige ».

সেই ধানে সেই চা'ল । গিরি বিনে আলখাল ॥

« So much paddy gives so much rice (as before) : but everything is topsy-turvy in absence of the mistress of the house ».

(I) Regarding ridiculous and preposterous actions :

অবাক ক'রলি ভবি, অম্বলে দিলি আদা « You have made me aghast, Bhabhi : you have spiced acid curry with ginger ! »

অবাক ক'রলে নাকের নখে । কাজ কি আমার কানবালাতে ॥

« The nose-ring has stunned me : what then, is my use with earrings ? »

অবাক কলি বাক সরে না । গুড় দিয়ে মুড়ি ভাল লাগে না ॥

« I am rendered speechless with the affairs of the modern evil days : I no longer relish fried rice with molasses ! »

অবিস্তীর্ণ টুনকো ব্যাথা « A nullipara to have inflamed breasts ! »
Cf. Hindi : *bin jane kũ thanailũ huũ hai* « no child brought forth and breasts inflamed ! »

অসহরন সহিতে নারি ।

খালার জলে ডুবে মরি ॥

(or শিকেয় ব'সে ঝুলে মরি ॥)

« I cannot endure which cannot be endured : let me drown myself in the water in a plate (or, hang myself down on a swinging pot stand) ».

আপনার শিরে প'ড়ল হাঁড়ী । ভাত রেখে আমানি বাড়ি ॥

« The cooking pot has smashed over my head : let me keep away boiled rice and serve stale gruel for myself ».

আমানি খেয়ে দাঁত ভেঙ্গেছে, সিঁছর প'রবি কিসে ? « You have drunk stale gruel and have thereby broken your teeth : wherewith would you put on vermilion paint ? ».

আর সওদা যেমন তেমন, খোঁপাবাঁধা দড়ী * Other items of marketing so so, but ribbon for hairdressing (must not be forgotten) *.

আদর বিবির চাদর গায়। ভাত পায় না, ভাতার চায় ॥

* Dame Love has a veil on her person : she goes without food but longs for a husband *.

আশুক না আশুক বর। সঁীতে প'রে মর ॥

* The bridegroom may come or not : you die of wearing the tiara *.

উদ খেতে খুদ নেই নেউলে বাজায় শিঙ্গে * She has not got even rice grains to drink water with, while there is a mongoose to sound the horn *.

এক গাঁয়ে ঢেকি পড়ে আর গাঁয়ে মাথা ব্যাথা * The husking machine works in one village, but somebody in another village feels a headache for it *.

ওহুঁ ছুঁড়ি, তোর বিয়ে। হাতে তালি দিয়ে ॥

* Stand up, you hussy : your marriage ceremony comes off with mere handclaps *.

ওর বাপ যার স্বশুর। সে হয় আমার ভাসুর ॥

* He whose father-in-law this one's father is, is my husband's elder brother *.

'ওরে সেখো, ভাত খাবি?' হাত ধুয়ে ব'সে আছি।

* 'Will you dine, Sedho?' 'I am quite ready having washed my hands' *.

কত সাধ যায় রে চিতে। মলের আগায় চুটকী দিতে ॥

* So many desires of heart!—to wit, to show off anklets with toe-rings *.

কতই সাধ হয় যে চিতে। ফোকলা দাঁতে মিশি দিতে ॥

* So many longings!—to wit, to blacken teeth where there are none *.

কথার নেই মাথা, ব্যাঙ্গে চিঁড়ে দই খায় * There is no sense in the story : as if a frog partakes of a dish of rice and curds *.

ক'নের মা ক'নে বাখনায়, আমার মেয়েটি ভালো।

(আর) ধান সিজানো হাঁড়ীর চেয়ে একটু কিছু কালো ॥

‘The girl’s mother praises her daughter’s beauty, ‘my girl is nice looking, only she is a shade darker than the clay pot for boiling paddy’

কাকে এলে কি শেখাতে । কাঁচকলা দিয়ে কান বেঁধাতে ॥

‘To whom have you come to teach—to pierce ears with raw bannana?’

কিবা ছেলের মুখের হাঁই । তবু হলুদ মাখেন নাই ॥

‘What a lovely face the child has! He has not yet toilet-
ted with turmeric’.

কোন্ কালে হবে পো । নেকড়া কানি তুলে থো ॥

‘No knowing when a child is going to be born, yet you are making ready for it!’

খাঁদা নাকে নথ, আর গোদা পায়ে মল ‘A nose-ring in a flat nose,
and anklets on swollen legs!’

খাবার সময় নবার মা ‘An important personage at the dinner
time only!’

খুস্কিতে তেল নেই, তালের বড়া ভাজা ‘No oil to anoint the
head which needs it badly, but she wants to fry palm cakes!’
Cf. Hindi : curtiyā kō tēl nahī pakauṛō ko jī cāhe ‘No oil for
her locks and she longs for fried cakes!’

খেতে পায় না পচা পুঁটী । হাতে পরে হীরের আংটী ॥

‘The poor wretch goes without food but puts on dia-
mond rings’.

গিন্নির ওপর গিন্নিপনা । ভাঙ্গা পিঁড়ের আলপনা ॥

‘Playing the mistress over the real one is as ridiculous
as ceremonial paintings on a broken flat stool’.

গা থম্ থম্ গা থম্ থম্ গা থম্ থম্ করে ।

কে নেবে মোর শাকের পেতে কে নেবে গো ধঁরে ॥

‘I am trembling, I am trembling, and I am trembling :
who is there to take hold of my basket of vegetable leaves?’

গোদা পায়ে আলতা পরা ‘To paint swollen feet red’.

ঘটকালি ক’রতে গিয়ে বিয়ে ক’রে এল ‘He went out to arrange for
other’s marriage, and himself came home married’.

ঘণ্টা বাজিয়ে দুর্গোৎসব, ইতু পূজোর ঢাক « The ceremony of the worship of Durga is finished off with the mere sounding of hand-bells, but in the worship of *Itu* (a much smaller affair) drums are beaten ».

ঘরসর্বস্ব তোমার, চাবিকাটি আমার « You are the master of the house, but the key I keep for myself ». Cf. Maithili : *bahuryā ke bara dulār, hāndī basan chūahī na pāvas* « Many caresses to his wife, but she must not touch the household vessels ! » ; Hindi : *gharbār tumhārā kōṭhī kuṭhlē kē hāth na lagānā*.

চালুনীতে ঘোল বিলান « To distribute whey in a sieve ! »

চুলের নামে খোঁজ নেই, তার বোকা পাঁচ হয় দড়ি « No trace of hair, but there is quite a load of ribbons ! » Cf. Hindi : *ḍekh ekō nahī, kajrautī das ṭhāī* « Eyes she has none, but she has ten pots of lamp-black (for her eyes) ».

ছিল নাকো ষেঁটু পূজো । একেবারে দশভুজো ॥

« They did not even hold the worship of *Ghentu* before : now they all at once worship the Ten-armed Goddess ! »

জন্ম গেল ছেলে খেতে, আজ বলে ডান « Whole life is passed in gobbling children : now they say that I am a witch ! »

ডেকে বলে ভাড়ানী । ছেলের বিয়েতে চাই আড়ানী ॥

« A mere wage-earner, but she must have an elephant canopy on her son's marriage ».

তিন কাল ছেলে খেলুম, আজ বলে ডান, See *supra*.

তপ্ত ভাতে নুন জোটে না পান্ডা ভাতে ঘি « No provision for a bit of salt in hot boiled rice, but he longs for ghee in stale rice ! »

তেলের ভাঁড়ে তেল নেইকো, পলায় মারে যা ।

এতদ্দেশের বউকাটকী ছিদাম তেলির মা ॥

« Not a drop of oil in the pot, but she strikes the spoon against the pot to get a drop : such a kind of vigorous mother-in-law is the mother of Chidām Teli here ! »

দেখে দেখে লাগল বাঁধা । পেত্নীর পৌদ পেতল বাঁধা ॥

« Looking on and on I am puzzled to find that the hips of a she-goblin is mounted with brass ! »

দোল দেখতে ভাতার ম'ল, রথ দেখতে যাই « Husband died when I went to witness the Spring festival : let me now go to join the Car festival ».

ধনসোহাগী মরেন খুদের জাউ খেয়ে « The lady talks of her riches, but is sick of drinking rice gruel only ».

নাচতে এসে ঘোমটা টানা « To draw the veil on when come to dance in public ».

নাচুস্তীর (or হাণ্ডুস্তীর) লাজ নেই, দেখুস্তীর লাজ « No shame in the dancer but in the girl who witnesses it ! »

না বিইয়ে কানায়ের মা « Kānāi's mother without bearing him ».

পরের পুতে বরের বাপ « To play the bridegroom's father when he is not it ».

পরের দোষ আকাশ জোড়া আপন দোষ ছোট ।

চালুনী বলে, ধুচুনী ভাই তুমি কেন ফুটো ॥

« Other's short comings are enormous, while one's own is nil : the sieve asks the net, ' why are you porous, sister ? ' »

পোঁদ যাচ্ছে ক্ষয় । চাল্তা বোঝা বয় ॥

« His loins are wearing out but he must carry the load of *Chāltā* fruits ».

পোঁদে নেই ইন্দি, ভজরে গোবিন্দি « Not a shred to cover the loins with : do then worship God ».

বউ উঠতে ঠাই পায় না, উঠোন জোড়া দাসী « No room for the daughter-in-law to step in, but her attendants can fill up an entire courtyard ».

বল দেওরা রে এর ব্যাওরা কি ।

নন্দাইয়ের কোলে কেন শোয় না ঠাকুরঝি ॥

« Say, brother-in-law, what is the matter : why does not my sister-in-law live with her husband ? »

বাঁচলে কত দেখব আর । ছুঁচোর গলায় চন্দ্রহার ॥

বেরালের কপালে ঢীকে । বাঁদর বেড়ায় হলুদ মেখে ॥

« What more I shall have to see, if I live, than this that a mole wears diamond necklace, a cat goes decorated in her forehead and a monkey toilets himself with turmeric ! »

বাছা আমার ছিরখণ্ডী । বসে আছেন বড়াই চণ্ডী ॥

◀ My child sits decorated with sandal paste but looks like the image of *Candī* at *Barāi* ▶.

বাড়া ভাতে নেড়া গিন্নি ◀ The shaven-headed mistress when dinner is served ! ▶ Cf. খাবার সময় নবার মা, *supra*.

বাপ জানে না, মা জানে না, হোগল বনে বিয়ে ◀ Unknown to the parents she is being married in a swamp of reeds ▶.

বাছার আমার কিবা রূপ ।

ঘুঁটের ছাইয়ের নৈবিদ্যি, খেংরা কাটির ধূপ ॥

◀ O the beauty of the child ! He should be worshipped with the offering of a dish of ashes and the incense of broomsticks ▶.

বার কাঁদি নারুকোল তের কাঁদি কলা ।

আজ রাণীর উপবাসের পালা ॥

◀ A meal of twelve bunches of cocoanuts and thirteen bunches of bannana,—to-day is but a fast day of the queen ! ▶

বিষ নেই, কুলোপানা চক্কর ◀ No vestige of venom but quite a huge hood ! ▶.

বুড়ো বয়সে দুধতোলানি ◀ Disgorging mother's milk in old age ! ▶. Cf. *būr̥h bhoil*, *būr̥h ghaus na chūtal*. ◀ He has grown old but his childishness has not left him ▶.

বৃন্দাবনে আছেন হরি । ইচ্ছে হ'লে রইতে নারি ॥

◀ God is in *Bṛndāban*; if I like I may leave home ▶.

ব্যাঙ্গের নাকে মিনের নোলক ◀ Enamelled nose-top in the nose of a toad ▶.

বেটির কি মূর্ত্তি । শেওড়া গাছের চক্রবর্ত্তী ॥

◀ What a beauty the woman is !—just like the queen of a *Seorā* tree, i.e., a goblin ▶.

বেরিয়ে এলুম, বেশা হলুম, কুল ক'রলুম ক্ষয় ।

এখন কিনা ভাতার শালা ধমকে কথা কয় ।

◀ I have forsaken my home and family and have become a woman of pleasure : and here comes the devil of a husband and chastises me ! ▶

ভাত পায় না, মল প'রে নাচে « No food to eat but she dances with anklets on ! »

ভাত পায় না, চিঁড়ের নাগর । আমানি খেয়ে পেটটা ডাগর ॥

« No rice to eat, he fills his stomach with stale gruel, but longs to eat rice cakes ! »

ভাত পায় না, ভাতার চায় । থেকে থেকে আবার গয়না চায় ॥

« She gets no meal but wishes for a husband, and from time to time she longs for jewellery as well ! »

ভাতার থাকতে উদ্‌মো রাঁড়ী « A rampant widow with her husband living ! »

ভাজা মাছটি উল্টে খেতে জানে না « He does not know even to eat the other side of a fried fish ! »

ভারি তো বিয়ে, তার দুপায়ে আলতা « What a marriage and she has painted both her feet crimson ».

ভাল কথা মনে প'ড়ল আঁচাতে আঁচাতে ।

ঠাকুরঝিকে নিয়ে গেল নাচাতে নাচাতে ॥

« A great news I have remembered while washing hands and mouth : it is this,—they have taken away my sister-in-law dancing ! »

ভুলি লো ভুলি ।

খর জ্বালে খই আসকে, ধিকি জ্বালে সরুচাকলি ॥

« Hear me, Bhuli; fried paddy and rice cakes are made in strong heat, but lentil cakes in slow heat ».

মা আইবড় থাকতে বেটি শ্বশুরবাড়ী যায় « Mother remains a spinster but the daughter goes to her husband's home ! »

মাগ নেই, তার শ্বশুরবাড়ী « No wife but a father-in-law's place ! »

মা বেচে খায় কল্মী শাক । বেটার মাথায় ফরমাসে পাগ ॥

« Mother lives by selling *kalmi* leaves, while son wears a turban made to order ». Cf. Hindi : *ghar mē dēkhō chalnī na chāj, bāhār mīyē tīrandāz*. « Not a sieve or winnowing basket at home, but he is a Sir Knight abroad ».

মূলে মাগ নেই, উত্তর শিওর « Not even a wife, yet afraid of lying with the head to the north ! »

মূলে মাগ নেই, ফুলশয্যে « No marriage yet a honeymoon ! »

মোটো মা রাঁধেনি, তপ্ত আর পাস্ত « Mother has not cooked at all : how can there be the talk of a hot or cold dinner ? »

রাঁয়ায় প্রাণ জুড়োয়, গাঘর হলুদ « She cooks the worst but smears herself throughly with turmeric ».

স'জনে শাকে নুন জোটে না, মন্থর ডালে ঘি « He cannot procure a pinch of salt to be eaten with vegetable leaves but desires for ghee in lentil soup ». Cf. তপ্ত ভাতে নুন জোটেনা, পাস্ত ভাতে ঘি, *supra*.

শাঁখা হাতী শাঁখা নাড়ে । বেরাল বলে ভাত বাড়ে ॥

« A woman with conch bracelets on jingles them, while the cat thinks she is serving her (the cat) dinner ».

শাকেই এত নাড়া ।

ডাল হ'লে ভাজত হাঁড়ি, ভাস্ত কত পাড়া ॥

« So much brandishing of ladles when cooking only vegetable leaves ! Had she cooked lentil soup she would have smashed the pot and drowned so many villages ».

শুনলে কথার ছন্দ ।

হাঁড়ি ভেঙ্গে মাছ পালালো, ঝোল রইল বন্ধ ॥

« Do you hear the style of his speech ? The fish breaks the pot and makes its escape, and the soup should remain intact ! »

শুনলে কথার ভাবখানা ।

হাঁড়ি ভেঙ্গে মাছ পালালো, ঝোল দিয়ে কেন ভাত খা না ॥

« Do you see her drift ? The fish has broken the pot and has escaped ; why do you not eat rice with soup (remaining) ? »

সতী মাগীর তাঁতি নাঙ « Dame Chastity having a weaver paramour ».

সাত ভাতারী সাবিত্রী « A Sāvitrī having seven husbands ! »

সব্ লো সব্ । আমার নোতুন মলে লাগবে জল ॥

« Away with you ! My new anklets may touch water ».

সেই বুড়ি নাচে । কত কাচ কাচে ॥

‘The old hag has got to dance, yet she makes so many objections’.

সেই তো মল খসালি । তবে কেন লোক হাসালি ॥

‘You have at last taken off your anklets : why did you then give the people occasion to laugh at?’

হই গিন্নি, না ছুঁই হাঁড়ী ‘Let me be the mistress of the house but let me not touch the cooking pot’.

হেঁদি কয় পেঁদিকে বোঝা লো । টেকি দিয়ে কান বেঁধা লো ॥

‘Hedi speaks to Pēdi, ‘look here, get your ears pierced with a husking ram’.

(J) Miscellaneous :

অভাগীর বন্ধ ফাটা । তিন ঠাই তার হুঁহুরকাটা ॥

‘Luck of the wretched woman is cracked and also incised by mice in three places’.

অভাগিনীর দুটো পুত । একটা দানা একটা ভূত ॥

The wretched woman has two sons : one is a demon and the other is a goblin’.

অভাবে নাতজামাই ভাতার ‘When there is no help the husband of the grand-daughter becomes the husband’.

অরুণ নেই বরুণ আছে ‘No good qualities but very many bad ones’.

অরাধুনের হাতে পড়ে কই মাছ কাঁদে ‘A perch feels sorry if it is being cooked by a bad cook’.

অলকাভিলকা সার ‘Toilets and nothing further!’.

অকাল গেল, সুকাল এল । কত দোষ দিয়ে বোনপো গেল ॥

‘Evil days are passed and good days are come, but my sister’s son has left me after finding so many faults’.

আকালের বারি । মায়ে ঝিয়ে জল পিয়ে মরি ॥

‘Water in draught : we, mother and daughter, drink and drink water’.

আয়েস লুকোবি, বয়েস লুকোবি । গালভাজা তোর কোথায় খুঁবি ॥

• You may keep your age and habit secret : but how can you hide your crumpled cheeks? •

আত্মিকালের বস্ত্রি বুড়ি • A *vaidya* woman of the pristine days •.

আপনার ছেলে খায় এতটি । বেড়ায় যেন লাটিমটি ॥

পরের ছেলে খায় এতটা । বেড়ায় যেন বাঁদরটা ॥

• One's own son eats so little and moves about like a top : other's son eats so much and jumps about like an ape •.

আম শুখোলে আমসী । ঘোঁবন গেলে কাঁদতে বসি ॥

• One makes pickles of dried mango, but one has to weep over one's ebbing youth •.

আগার নাম যমুনাদাসী । পরের খেতে ভালোবাসি ॥

• My name is Yamunādāsī, and I am awfully fond of dining at other's cost •.

আমি খাই ভাতারের ভাত । তোমার কেন গালে হাত ॥

• I eat my husband's bread : what should you wonder at? •

আজ আমাদের রান্না বাড়ন, কাল আমাদের খাওন ।

আমার আজও থাকন, কালও থাকন, পরশু আমাদের যাওন ॥

• To-day we cook, and to-morrow we feast; I stay here to-day and to-morrow : day after to-morrow we depart •.

আসেন লক্ষ্মী, যান বলাই • (A guest) is as welcome as the Goddess of luck, and is got rid of like a pestilence •.

উটকপালী চেরোনদাঁতী । গোদা পায়ে মার্ব লাথি ॥

• You call me one with a prominent forehead like that of a camel and having teeth like combs ! I shall give you a kick of my fat legs •.

উত্তরে মেয়ে, পূবে নেয়ে • A girl from the north and a sailor from the east (are equally clever) •.

উলোর মেয়ের কুলুজী, অগ্রদীপের খোঁপা ।

শান্তিপুুরের হাতনাড়া, শুষ্টিপাড়ার চোপা ॥

* Pedigree of the girls of Ulā, top-knots of the girls of Agradvīp, flourish of arms of the girls of Śāntipur, and the tongue of the girls of Guptipārā *.

এক কলসী জল তুলে কাঁকালে দিলে হাত ।

এই মুখে খাবে তুমি বাগ্‌দিনীর ভাত ॥

* You have drawn only a pitcher of water and you tire out; how can you expect to get dinner from the low-caste woman? *

এক বেগুন, তাও নুনে বিষ (or পোড়া) * A single curry but overdone with salt! *

এক মায়ের এক পুত্র । খায় দায় যমের দূত ॥

* Only son of a mother; he eats, drinks and roams about like a devil *.

এক হেঁসেলে তিন রান্ধুনী । মরে গেল তার ফেন গালুনী ॥

* Three cooks in a single kitchen, and the handmaid is overworked *.

একলা ঘরের গিনি হব । চাবিকাটি ঝুলিয়ে নাইতে যাব ॥

* I shall be the sole mistress of my house, and would hang down the bunch of keys at my side and go to have my bath *.

একলা মায়ের ঝি । গরব করব না তো কি ॥

* Only daughter of my mother, why should I not be proud of it? *

একে রান্ধের ভাত, তায় মস্তুরের ডাল * It is the dinner of a widow; add to it lentil soup *.

একেই নাচুনী বুড়ি, তায় নাৎনীর বিয়ে * The old lady is given to dancing fits: then again there is the occasion of her granddaughter's marriage *.

এত কলাই ভাতে । ছোট ঠাকুরের পাতে ॥

এত ডাল দিয়েছে ভাতে । তবু নেই বড় ঠাকুরের পাতে ॥

* So much boiled lentils, all in the plate of my husband's younger brother; so much boiled lentils, yet none in the plate of (her) husband's elder brother! *

ওলো রঙ্গী, তোর ঘর পুড়বে, পুড়ুক গিয়ে ঘর ।

আমার তো রঙ্গ পুড়বে নাকো তাতে কিবা ডর ॥

‘You sportive girl, your house may catch fire.’ ‘Let it ; it would not spoil my sport : so there is no fear’. Cf. Hindi : *ghar jwal gayā, tab curiyāī pūchī* ‘When the house was on fire they admired her bungaloes’.

কত দুঃখের নীলমণি । জানে দিদি রোহিণী ॥

‘Sister Rohinī knows what a treasure of pains Nilmanī is’.

ক’নের মা কাঁদে । আর টাকার পুঁটুলি বাঁধে ॥

‘Bride’s mother weeps but ties the purse securely’.

ক’নের ঘরের মাসী । বরের ঘরের পিসী ॥

‘Aunt to the bride and to bridegroom as well’.

কপালে আছে বিয়ে কাঁদলে হবে কি ? ‘Fated to be married : what would tears avail?’

কানা কণ্ঠের নানা রোগ ‘A blind girl suffers from other diseases’.

কাল নয়নে কেলে সোনা । ইচ্ছে করে কত জনা ॥

‘A black-eyed dark jewel, so many people love her’.

কুঁতুলে নাড়ী কোঁ কোঁ করে । কোঁদল নইলে থাকতে পারে ॥

‘Bowels of quarrelsome persons cry out : they cannot do without quarrelling’.

গড় করি পিঠে, দাঁত ছেড়ে দে ‘I beg your pardon, cake, let go my teeth’.

গলা টিপলে দুধ বেরোয় ‘Mother’s milk comes out if pressed by the neck’.

ঘরে নেই বা । ছেলে চায় তা ॥

‘Child likes to get whatever is wanting at home’.

চন্দ্র সূর্য্য অস্ত গেল, জোনাকির পোঁদে বাতি ।

বিস্তর ক’রলে পেটের পুত, কি করবে নাতি ॥

‘The sun and the moon are down and light at the tail of fireflies; much has indeed been done by one’s own son ; what can a grandson do?’

ছোট শরাটি ভেঙ্গে গেছে, বড় শরাটি আছে।

নাচ কৌদ কেন বউ, আমার হাতের আটকাল আছে ॥

« The smaller cup is broken and there remains only the bigger one,—why do you make much of this, daughter-in-law mine? I have an idea of the measure in handfuls ». The story is this. A woman tortured her daughter-in-law very much, and used to give her food in the measure of a small bowl, which was exceedingly insufficient. Now the pot was broken one day, which made the poor girl quite happy on the thought that her mother-in-law would thenceforth dole out food in the bigger bowl remaining. The above is her mother-in-law's rejoinder.

ঝির ঝি, করবে কি? « Daughter's daughter,—what can she do? »

টেকশালে যদি মাণিক পাই। তবে কেন পর্বতে যাই ॥

« If one finds a diamond in the husking shed, why should one go to the mountain for it? »

তুমি যেমন রসিক নাগর আমি তেমন মেয়ে « I am quite a match for you, my dandy ».

তেল দাও, সিঁদুর দাও, ভবি ভোলবার নয় « You may give oil and paint for toilet : Mrs. Bhabī is not to be coaxed ». Cf. Hindi : *gūṛ bājāṛ bannē kē lōlōhī nahī* « You may play and sing, but you would not please the bridegroom ».

তৌতুলতলা দিয়ে গেলে গলায় দুধ বসে যায় « He is so young that if he happens to pass by a tamarind tree his mother's milk curdles up ».

তোদের হলুদ-মাখা গা। তোরা রথ দেখতে যা ॥

আমরা হলুদ কোথা পাব। আমরা উল্টো রথে যাব ॥

« You have toiletted with turmeric paste, you may go to the Car festival. Where can we get turmeric?—so we shall have to go to the return Car festival ».

তোর শিল, তোর নোড়া। তোরই ভাঙ্গি দাঁতের গোড়া ॥

« Yours the mortar, yours the pestle too : let me crush your teeth out with them ».

থাক রে কুকুর আমার আশে । ভাত দোবো তোকে পৌষ মাসে ॥

* Entertain hopes on me : I would give you a dinner in the month of Paus (December-January) *.

দাইয়ের কাছে কৌক ছাপা * To feel shame in the presence of a midwife *. Cf. Hindi : *dāise peṭ nahi chiptā*.

দায়ে পড়ে দাইকে ডাকা * To give the midwife a call when in a fix *.

ধান ভান্তে শিবের গীত * To sing in praise of Siva, when come to husk paddy *.

ধান ভানাবি গা । না-ভানাবার গা ॥

* ' Would you have your paddy husked? '—' No, thanks ' *.

নিজের বেলায় আঁটি-ছুঁটি । পরের বেলায় দাঁতকপাটি ॥

* For himself spoils; but a grin for others *.

নিতে পারি, খেতে পারি, দিতে পারি না ।

ব'ল্তে পারি, কহিতে পারি, সহিতে পারি না ॥

* I can take, I can eat, but I cannot give anything : I can speak, I can talk, but I cannot endure anything *.

নেই কাজ, তো খই ভাজ * Nothing to do?—Fry paddy then *.

পড়ল কথা সভামাঝে । যার কথা তার গায়ে বাজে ॥

* A topic is discussed in a gathering : he whom it concerns can feel it alone *.

পরের দিবা পাস্তা ভাত * Other's dinner of stale rice is nice indeed *.

পোয়ের নামে পোহাতী বর্তায় * Mother is satiated at the instance of the infant *.

বউ ভাঙ্গলে সরা । গেল পাড়া পাড়া ॥

গিন্নি ভাঙ্গলে নাদা । ও কিছু নয় দাদা ॥

* Daughter-in-law breaks a clay cup, and it echoes in distant quarters; mistress of the house breaks a big earthen vat,—' that is nothing, brother ' *.

বাঁজির পুতকে হাঁচির ষা সয় না * Son of a barren woman cannot bear the blow of a sneeze *.

বাপ পোয় বরতি । মায়ে ঝিয়ে এয়োতি ॥

« Father and son are the priests, and mother and daughter are the *eyo* (i.e., women with husbands living, who are fed and feed in a religious ceremony) ». Cf. বাপ পুরত মা এয়ো । ঘরের সামগ্রী বাইরে না যেয়ো ॥ « Father is the priest and mother the *eyo* : articles of the house remain at home ».

বাপের উপরোধে সৎমার পায়ে গড় « To bow low to the step-mother at father's request ».

ঝিয়ে হ'লে ছাঁদলায় লাথি « A kick at the canopied altar when the marriage ceremony is over ».

বুঝলুম তোমার গিল্পিনা । তেল থাকে তো তুন থাকে না ॥

« I appreciate your capacity as the housewife : if there be oil there is no salt ».

ভিন্নভাতে বাপ পড়'শী « With separate kitchens, even one's father becomes a neighbour ».

মধুপান ক'রতে পারি । মাছির কামড় সহিতে নারি ॥

« I can drink honey but cannot suffer the bite of bees ».

মাগুস্তুড়ের স্ত্রী শুধু ভাত খায় না « Wife of a habitual beggar seldom dines on simple rice ».

মাছের তেলে মাছ ভাজা « To fry fish in its own fat ».

মানুষের বড় মান । ছেঁড়া দু'টো কান ॥

« He has a great prestige, but both the ears are chopped ».

মায়ের বোন মাসী । কাদায় ফেলে খেসি ॥

বাপের বোন পিসী । ভাতকাপড় দিয়ে পুষি ॥

« Mother's sister deserves no more than to be kneaded like clay : father's sister deserves to be entertained with food and clothes ».

মুখটি যেন ভাজা খোলা « (Her) mouth is a frying pan, i.e., she is very garrulous ».

মুখ নয় তো, তোলো হাঁড়ী « (Her) face is always grave like a big earthen pot ».

মেয়ে যেন আমার ডাল ধ'রেছে « The girl has caught hold of a mango tree, *i.e.*, she is very tenacious ». In days long gone by, when a lady wanted to burn herself in the funeral pyre with her dead husband, she would break off a mango twig and hold it in her hand. This signified that she was determined to be a Suttee.

যতই কর শিব-সাধনা । কলঙ্কিনী নাম যাবে না ॥

« However much you may worship Siva, your illfame as an unchaste woman would be never wiped out ».

যশোদা কি ভাগ্যবতী । পরের পুতে পুত্রবতী ॥

« What a luck Yaśodā has ! She is mother with another's son ».

যা'কে বললে ছি । তার রইল কি ॥

« Nothing remains for him at whom they cry out 'fie' ! »

যাকে দেখতে নারি, তার চলন বাঁকা « Even the gait of one who is hated is crooked, *i.e.*, to find fault any way ».

যার তরে পালাও তুমি, সেই দেবী আমি « I am that goddess whom you avoid ».

যার সঙ্গে ঘর করিনি, সে বড় ঘরনী ।

যার হাতে ভাত খাইনি, সে বড় রাঁধুনী ॥

« She is indeed a great house-keeper, with whom I have never lived : she is really a great cook, who has never served any food to me ! ».

যার নাম ভাজা চাল, তার নাম মুড়ি ।

যার মাথায় পাকাচুল, তার নাম বুড়ী ॥

« *Muri* is but another name for fried rice : 'old woman' is another name for one who has grey hairs ».

যে এল চ'ষে । সে রইল ব'সে ॥

« He who comes after working in the fields sits neglected ».

যেমন মা তেমন বি । তিন গুণে তার নাতিনটি ॥

« Like mother, like daughter : grand-daughter is thrice blessed ! »

রতন গর্ভের পোতন সন্তান « An imp of a child of a virtuous mother ».

রঙ্গের বেলায় রংগা কড়ি । রঙ্গ ফুরোলে গড়াগড়ি ॥

* At the time of sport many trinkets : when the sport is finished no care *.

শাক দিয়ে মাছ ডাকা * To cover up fish with vegetables *. A widow (to whom meat or fish is a prohibited food) was once secretly eating her rice with fish curry. She was then surprised by a guest when she suddenly covered up fish with vegetable curries. Widows are maliciously suspected of eating fish in secret.

সকল নোড়াই যদি শালগ্রাম হয়, তবে হলুদ বাঁটি কিসে ?

* If all pebbles turn out to be sacred ones, wherewith is turmeric paste to be prepared ?

সাজ করতে দোল ফুরোলো * By the end of her toilet the spring festival was finished *.

সাত রাঁড় এক এয়ে ।

বার কাছে যাই, সে বলে আমার মত হ'য়ে ॥

* Seven widows and one lady with her husband living,—whomsoever I go to, she wishes me to share her fate.

হাড় খাব, মাস খাব । চামড়া নিয়ে ডুগুড়ি বাজাব ॥

* I shall eat your flesh and chew your bones, and would make a tambourine of your skin and beat it *.

হাতে কালি, মুখে কালি । বাছা আমার লিখে এলি ॥

* Inkstain in your palms and face,—my dear child, you are come from school *.

Proverbial Sayings in Mediaeval Vaisnava Literature.

From the mediaeval and early modern Bengali literature—especially from the songs of the mediaeval Vaisnava poets—we come across a few proverbs which apparently belonged to women's linguistic and literary stock. Some instances are adduced below.

[এ বোল বুলিতে কাহাঞি মুখে লাজ বাস ।]

এতৌহো নাহি যুচে তোর মুখে দুখ বাস ॥

• [You should feel ashamed, Kāhñāi, for uttering such sentiments], for even now you smell of your mother's milk (*i.e.*, you are so young) *; Śrīkrṣṇakīrtana, p. 95.

ভুখিল হয়িলে কাহ্নাঞি দুই হাতে না খাইএ ।

• Nobody, however hungry, does eat with both his hands *; *op. cit.*, p. 118.

কাটিল ঘাঅত লেঙ্গুরস দেহ কত ।

• How much lemon juice would you apply to a wound? *; *op. cit.*, p. 398.

[তোন্ধে রাখোআল জনে] কড়াচারী কড়ি ধনে

[আপনাক জানহ ঈশরে ।]

• [You the cowherd folk] play the master with a farthing; [you think yourselves to be lords!]; *op. cit.*, p. 106.

কার পান চুন নাহি খাও ।

[কাহারো পাস নাহি জাও ॥]

• I never take even a betel leaf or a bit of lime (to eat it with) from anybody : [I go to nobody to pay a visit] *; *op. cit.*, p. 64.

পরধন দেখিলে কি পাএ ভিখারী ।

• If a beggar sees other's wealth, does he get it? *; *op. cit.*, p. 59.

ভাতের ভোখ কাহ্নাঞি ফলে না পালাএ ।

• Longing for a taste of boiled rice is never satisfied with eating fruits, O Kāhñāi *; *op. cit.*, p. 128.

দেখিয়া সাধুর ধন চোর পড়ী মরে ।

• A thief, on seeing honest man's treasures, hankers after it *; *op. cit.*, p. 198.

পাত পাতিয়া কেহে নাহি দেহ ভাত ।

• Why do you not serve meal after arranging the plates? * *op. cit.*, p. 213.

বন পোড়ে আগ বড়ায়ি জগ জনে জানী ।

যোর মন পোড়ে যেন কুস্তারের পনী ॥ *op. cit.*, p. 294.

See supra, p. 62.

[আম্বাকে বল কৈলে তোর নাহি কিছু ফল ।]

মাকড়ের হাতে যেহু বুনা নারীকল ॥

• [Nothing would avail if you assault me]; it would be same thing as a dry cocoanut in the hands of a monkey •; *op. cit.*, p. 72.

লাজে সে হারায়ি কাজে ।

• Coyness is a bar to success •; *op. cit.*, p. 53.

লোভ হয়িলে কাঙ্ক্ষাঞি আরতী না করী ।

গোপত কাজত কাঙ্ক্ষাঞি ছয় আখি বারী ॥

• If there be a desire for something one should not hanker after it; in secrecy six eyes are enemies •; *op. cit.*, p. 185.

হাথ বাটায়িলে কি চান্দের লাগ পাই ।

• Does one's arm reaches the moon if stretched at it? • *op. cit.*, p. 180.

ননদী বিষের কাঁটা বিষ মাখা দেয় খোঁটা

• Sister-in-law is like unto a poisonous thorn : her taunts smart like poisonous darts • [Candidāsa].

চোরের মা যেন পোয়ের লাগিয়া

ফুকরি কাঁদিতে নারে ।

• As if the mother of a thief cannot cry aloud for her son •; *op. cit.* Cf. চোরের রমণী যেন ফুকরিতে নারে, *infra*.

বাহিরে বাতাসে ফাঁদ পাতে ননদিনী ।

• Sister-in-law sets up a snare in the air outside •; *ibid.* Cf. বাতাসে পাতিয়া ফাঁদ কোন্দল ভেজায় • She finds occasions for quarrel by setting up nooses in air • [Vidyāsundara].

কাকর অঙ্গনে কো পুন নাচ ।

• Somebody dances in other's courtyard • [Govindadāsa].

হাতক লক্ষ্মী চরণ পরে ডারনু

• I have thrown the luck of hand at the feet »; *ibid.*
Cf. হাতের লক্ষ্মী পায়ে ফেলা।

বরাকের দানী সোনায়ে সাধ।

• Candidate for a farthing desiring for gold ! » [Jñānadāsa].

মাঝ পাথার জলে তৃণ হেন বাসি।

উচিত কহিতে নাই এ পাড়া-পড়ঙ্গী।

• I feel like a straw in the midst of a stream; and there is no neighbour to speak the truth »; *ibid.*

চোরের রমণী যেন ফুকরিতে নারে।

• As the wife of a thief cannot cry aloud »; *ibid.*

জানিয়া তিন কোনের খড় দিনু ও স্নুখের মুখে

তবু আমার দুখের নাহি পার ॥

• Knowingly I have set fire to that pleasure with straws from the three gables; yet there is no end to my sorrows » [Balarāmadāsa].

দেখা দিয়া যাইতে বন্ধু কিবা ধন লাগে।

• How much does it cost, my friend, to pay [me] a visit? ».
ibid.

Corrigenda

Page 8, line 19, read *prākṛta* for *prākṛita*.

Page 15, lines 3, 7, 13 read Hemacandra for Hemcandra.

CHAPTER XIV.¹

AGRICULTURE.

Agriculture has always been the principal source of occupation in Bengal. The Old Bengali Literature besides giving details of cultivation contains many adages which embody the agricultural wisdom of the people. Thus we find such expressions ² as "Cultivation should be personally done by the owner of the soil. He should himself plough the land being aided by his son. In case the son being not available for the purpose, the brother should step into his place. No third person should be relied on in the matter." Again, "In agriculture he who works himself is sure to get much profit, while he who simply does the work of supervision gets only half the profit. But he who is lazy enough to stay at home and enquire about his cultivation from there as a third person is sure to lose in the concern." Their caution shows that the peasantry of Bengal had no idea of organised labour. 'Dhenki' or the rice-husking pedal was once considered as an indispensable implement for domestic purposes. The house which did not contain a 'dhenki' was branded as forsaken by good luck.³ Although the well-known Sanskrit saying "বাগিজ্যে বসতে লক্ষ্মী," etc., has put trade first among

¹ In continuation of the Chapters published in the Journal of the Department of Letters, Vol. XVII.

² বাপ বেটার চাষ চাই ।
তা অভাবে সোদর ভাই ॥
* * * * *
খাটে খাটায় লাভের গাঁথি ।
তার অর্ধেক কাঁধে ছাতি ॥
যরে ব'সে পুছে বাত ।
তার যরে হা ভাত ॥
—খনার বচন ।

³ বাহার যরে নাহি ঢেঁকি মূল ।
সে বহুধির নাহিক কুশল ॥
—ডাকের বচন ।

the four recognised means of livelihood, the Bengali saying differed from it and dared give agriculture the first place. Thus:—¹

“Although it is said, trade gives wealth still there can be no denying the draw-backs of trade, the reason being that in trade people require much capital and take recourse to fraud. Into service, one should not enter, if one has the sense of self-respect in him. Beggary procures no wealth. Evidently it is then agriculture which is the most suitable occupation for a self-respecting person.”

In the Chandikavya of Kavikankan Mukundaram we learn that the poet though a Brahmin by caste lived by personally doing the work of cultivation.² In the Sanskrit work called Parāsara-Samhitā, a high place was given to agriculture. Herein advice has been given even to the Brahmins to carry on agriculture with zeal. “With the paddy cultivated by himself, or acquired from a field cultivated on his behalf, he should offer the five sacrifices (enjoined in the works on Smṛiti) and should likewise be engaged in celebrating the sacrificial rites such as the Veda prescribes (the five sacrifices are mentioned by Manu, in Ch. 3, St. 70).”³

¹ See Chāsā-pālā by Rameswar, C. U. MS. No. 2455, Fol. 3. See also F. 1 and 2.

² See Kavikankan Mukundaram's Chandikavya, p. 22 (C. U. ed.):—

“সহর সেলিমাবাজ তাহাতে সজ্জন রাজ
নিবসে নিউগী গোপীনাথ ।
তাহার তালুকে বসি দামিন্যায় চাষ চবি
নিবাস পুরুষ ছয় সাত ॥”

In the town of Selimabaj lives the good man Gopinath Neogy. I live in his Taluq and my village is Damunya. We are here for six or seven generations and our profession is agriculture.

³ Institutes of Parasara—Translated into English by K. K. Bhattacharyya Second Chapter (Bibliotheca Indica).

স্বয়ংকৃষ্টে তথা ক্ষেত্রে
ধাতৈশ্চ স্বয়মর্জিতৈঃ ।
নির্বপেৎ পঞ্চ যজ্ঞাংশ্চ
কৃত্ব দীক্ষাঞ্চ কারয়েৎ ॥

—পঃ সঃ ৬।২

Again,

ঘটকর্ষ সহিতো বিপ্রঃ কৃষিকর্ষ চ কারয়েৎ ।

—পঃ সঃ ২।২

Astrology in Agriculture :

The Bengali cultivators have been the tillers of the soil from hoary past with the aid of astrological observations. It is not exactly known how or whence this knowledge has come into the possession of the Bengali people, but this much may be surmised that the tradition points to a foreign origin.

Not only in old Bengali sayings but also in Sanskrit works such as 'Krisi-Parāsara' we have evidence of astrological belief being always associated with agricultural operations. The slokas given in the footnote refer to peculiar situation of the planets as bringing scarcity and drought seen during the rainy season.¹

Innumerable pithy sayings are often recited by the illiterate Bengali peasants showing their knowledge in the rudiments of astrology, although the meanings the sayings are not always clear. A few specimens are given below from Khanār Vachan by way of illustration.²

(a) If there be much rain and consequent overflowing of the country in the Bengali month of Sravan (July-August) and drought in the next month of Bhadra (August-September), if there be again rains submerging the lands under water though not to an excess in Aswin (September-October) and much rain without strong wind in Kartik (October-November), then surely that year abundant paddy crop will grow in the fields.

(b) When according to astrological calculations, in any particular year, Saturn occupies the highest position and Mars is next to him, then agriculture will not flourish that year.

¹ "কুজপুষ্ঠগতোভানুঃ সমুদ্রমপি শোষণয়েৎ । সদ্যো নিকৃন্তরেষুষ্টিং চিত্রামধ্যগতো ভৃগুঃ ॥" অপিচ,
"অঙ্গারকো যদাসিংহে তদাঙ্গারমরীমহী । স এব রবিনা যুক্তঃ সমুদ্রমপি শোষণয়েৎ ॥"

—কৃষিপরাশরঃ ।

² The Bengali months as represented here through the names of the figures of the zodiac have interesting similarity with the astrological expressions of the agricultural people of the Malabar side in the Deccan.

See "Economic life in a Malabar village," pp. 162-163 by J. Subbrama Aiyar.

(a) করকটুহরকট সিংহ হুকা কঙ্কা কানে কান ।

বিনা বায়ে বর্ষে তুলা কোথা রাখবি ধান ॥

(b) শনি রাজা মঙ্গল পাত্র ।

চব খেড় কেবল মাত্র ॥

(c) Says Khana, "The cotton which is grown in the month of Kartik (October-November) yields in abundance."

(d) If the planet Mercury be ascendant, and Venus be next to him then no doubt the fields will be overfull with crops.

(e) Bananas may be taken throughout the year with the exception of the Bengali months of Bhadra (August-September) and Chaitra (March-April).

The above lines are only a few out of many in which directions about agriculture are given in the technical phraseology of astrology.

Customs and Superstitions:

Next to astrology, the customs and superstitions of the country play an important part in agriculture. Without ignoring their value we are rather prone to think that they are not altogether useless, as many of them give the result of accumulated wisdom of many generations. Thus, following Khana, it is believed that sowing paddy seeds within the first five days of the month of Asadh (May-June) will yield much crop.¹ Nevertheless according to the same authority sowing is recommended throughout the month of Sravan (July-August) and the first 12 days of the next month.² Similarly the pulse 'Kalai' is to be sown either in the last four days of Bhadra (August-September) or within the first four days of Aswin (September-October) which are taken to be auspicious.³ Another

- | | |
|--|-------|
| (c) গুন ভাই খনা বলে ।
তুলার তুলা অধিক ফলে ॥ | —খনা। |
| (d) বুধ রাজা শুক্র মন্ত্রী যদি হয় ।
শস্ত্র হবে ক্ষেত্র পুরা নাহিক সংশয় ॥ | —খনা। |
| (e) সিংহ মীন বর্জে ।
কলা খাবে আজে ॥ | —খনা। |
| ¹ আষাঢ়ের পঞ্চদিনে রোপয়ে যে ধান ।
হুখে থাকে ফুটি বাস বাড়য়ে সম্মান ॥ | —খনা। |
| ² শ্রাবণের পুরো ভাদ্রের বারো ।
এর মধ্যে যত পারি ॥ | —খনা। |
| ³ ভাদ্রের চারি আধিনের চারি ।
কলাই রোব যত পারি ॥ | —খনা। |

variety of pulse known as 'Matar-Kalai' is to be sown throughout the months of Aswin (September-October) and Kartik (October-November) except the last nineteen days of the former and the first nineteen days of the latter month for getting a full harvest.¹ 'Tila' (sesamum) is to be sown either within the last eight days of Falgun (February-March) or within the first eight days of Chaitra (March-April).²

Of course the value of these directions may be under-estimated at the outset but a close study of the change of weather conditions and seasons will prove that the days thus recommended for sowing have generally some bearing on it. The peasantry have arrived at these conclusions after a close observation of the conditions of the soil in different weathers and different seasons. The sanctity attached to particular days of the week for sowing seeds, from whatever causes they may have originated, are totally without any scientific basis. There are some superstitions of which a scientific explanation may be traced,—“He who cultivates the soil in the days of the full moon and the new moon is sure to suffer misery. His cows suffer from rheumatism, and scarcity prevails in his house. According to Khana, he who tills land in these two prohibited days is ruined.”³ The two forbidden days are generally attended with storm and other inclemencies of the weather in Bengal. But “even the mighty king Rāvana was killed with all his family by planting bananas in the month of Bhadra (August-September)”⁴ seems to be a vain threat.

- ¹ আখিরের উনিশ, কার্তিকের উনিশ ।
বাদ দিয়ে যত পারিস মটর কলাই বুনি ॥ —খনা ।
- ² ফাল্গুনের আট চৈত্রের আট ।
সেই তিল দায়ে কাট ॥ —খনা ।
- ³ পূর্ণিমা অমাবস্তায় যে ধরে হাল ।
তার দুঃখ চিরকাল ॥
তার বলদের হয় বাত ।
যরে তার না থাকে ভাত ॥
খনা বলে আমার বাগী ।
যে চষে তার হবে হানি ॥ —খনা ।
- ⁴ ভাদ্রমাসে রুয়ে কলা ।
সবংশে নলো রাবণ শালা ॥ —খনা ।

Again, "the peasants are to start for the fields on an auspicious day. There should be no inauspicious things to be seen on the way. Just reaching the field they have to enter it by the eastern side and begin ploughing from thence." It is said, "all prosperity will smile on the peasants if they begin tilling from the eastern side of the field."¹ Similarly in collecting the harvest the southern side should be taken as the side for beginning work.²

Like the cultivators of Europe the Bengali peasants observe the ceremony of harvest-gathering called Navāṇṇa with much merrymaking. It is celebrated in the month of Agrahayana (November-December) or Pousa (December-January) when the winter paddy crop is gathered. References of Navāṇṇa (*lit.* new-rice ceremony) in the old Bengali literature are profuse. In the various 'Vāramāsis' we learn of Navāṇṇa which exists even to-day.³

Besides Navāṇṇa, 'Hala-Pravāha' or the 'First tilling ceremony' is another ceremony in connection with agriculture. Thus in Rameswar's Chāsā-pālā,⁴ we learn, after a brief shower in the latter part of the month of Magha (January-February) this ceremony was held in an auspicious time. As these ceremonies are still observed their dates of celebration are to be found in the annual Bengali almanacs.

In the story of Malua (Mymensingh Ballads) we learn of a ceremony at the time of ones going out for sickle-work during harvest time. Thus, when Chand Binode, the hero of the poem, was going out to the field for the above purpose his mother, "brought a sharp sickle and put it in the hands of her son bidding him at the time start for the fields for cutting the crops. Besides taking the sickle

¹ শুভক্ষণ দেখে ক'রবে যাত্রা ।
পথে যেন না হয় অশুভ বার্তা ॥
আগে গিন্না করো দিক্ নিরূপণ ।
পূর্বদিক হ'তে কর হাল চালন ॥
যা কিছু আশা পূর্বে সকল ।
নাহি সংশয় হবে সকল ॥

² See the song of Siva by Ramāi Pandit.

³ See Malua (Mymensingh Ballads).

⁴ See Chāsā-pālā by Rameswar, C.U. MS. No. 2455, F. 11.

with him Chand Binode took five sheaves from the Bātā grove and proceeded to the fields singing the Vāramāsi songs.¹

Agricultural Implements :

The agricultural implements though primitive and very commonplace, were even subjects of poetic effusions of some of our old writers such as Ramai Pandit and Rameswar,² and as such we find elaborate descriptions of the making of such implements as :—

- (a) লাঙ্গল—yoke,
- (b) জলুই— a pin or nail,
- (c) ফাল— a plough-share,
- (d) দা— a cleaver,
- (e) কাঁড়— a sickle,
- (f) গাঙ্গি— a frame,
- (g) মই— a ladder,
- (h) পাঁচন বাড়ি— a stick,
- (i) ঢেঁকি— a rice-husking pedal,

besides various other implements in connection with agriculture.

No doubt the services of the village blacksmith and the village carpenter have to be requisitioned for the purpose. In the Chāsā-pālā of Rameswar a vivid, though rather exaggerated, description of the making of these implements are found.

Weather :

Like astrological prognostications the people were once very fond of weather forecasts which were based on more or less practical observations, and as a consequence the results were surprisingly accurate. The peasant-folk got by heart the sayings of the cultivators' Manual—the 'Khanār Vachan'—and became accustomed to quote the lines about the observation of nature in their everyday life or field work. As a result of this, the people in general became trained in the study of weather conditions without the guidance of a costly Government Department. In a country where agriculture

¹ See Malua (Mymensingh Ballads), Bengali version, p. 44.

² See the song of Siva by Ramai Pandit and Chāsā-pālā by Rameswar, C.U. MS, No. 2455, F. 4, 8 and 9.

on a large scale based on scientific lines is unknown such simple methods are useful to the people, working as they do frequently under the freaks of nature in the tropical climate of Bengal.

The truth of the sayings will be evident from the following examples taken from the sayings of Khana :—

(a) If there be less cold in the winter month of Pausa (December-January) and more cold in the summer month of Baisakh (April-May), then there will be heavy rains in the beginning of Asadh (May-June) and excessive drought in the month of Sravan (June-July).

(b) If rainbow is seen in the eastern sky during the rainy season, surely there will be too much rain and consequent over-flooding of the land.

(c) If in one year the climate is cold in Chaitra (March-April), hail-storm in Baisakh (April-May) and clear sky (with stars distinctly visible in the firmament at night) in Jyaishta (May-June) then in that year the flood will come late in the last part of the rainy season.

(d) Why are you so much absorbed in calculation, O father-in-law, you will be able to forecast rains simply at the sight of the clouds. The patches of clouds (tech. cumulus) that are floating, with intermittent breeze at the same time, will tell you about the imminent rains. Under the circumstances you may unhesitatingly

- | | |
|---|-------|
| (a) পোঁবে গরমি বৈশাখে জাড়া।
প্রথম আবাড়ে ভরবে গাড়া। | —খনা। |
| (b) পূর্বেতে উঠিল কাঁড়।
ডাক্তা ডোবা একাকার। | —খনা। |
| (c) চৈত্রেতে থর থর।
বৈশাখে ঝড় পাথর।
জ্যৈষ্ঠেতে তারা ফুটে।
তবে জানবে বর্ষা বটে। | —খনা। |
| (d) কি কর ঋতুর লেখা জোখা।
মেঘেই বুঝবে জলের লেখা।
কোদালে কুড়লে মেঘের গা।
মধ্যে মধ্যে দিচ্ছে বা।
বলগে চাষার বাঁধতে আল।
আজ না হয় হবে কাল। | —খনা। |

advise the cultivators to go to the fields to make necessary preparations for raising the ridges to hold water. It may not rain to-day but you may surely expect it to-morrow.

(e) The rainbow in the western sky will bring drought but the rainbow in the eastern sky will fetch rains.

(f) The frequent croaking of frogs is a sure sign of immediate rains.

(g) When in the beginning of the Bengali year Baisakh (April-May) the wind blows from the north-east, you may be sure of heavy rains that year—says Khana.

(h) The days of the winter month of Pausa (December-January) which will be full of mist will be exactly equal with the days of the summer month of Baisakh (April-May) which will be in rains. When there is rain on Saturday it will continue for a week. When it will rain on Tuesday it will go on for three days. In other days it will end on the very day when it will begin to rain.

(i) If in any day of the month of Bhadra (August-September) there be clouds moving in the sky and the wind blowing at random from different directions, then, on that day heavy rains are expected.

(j) If there be rains in the month of Agrahayana (November-December) then famine is apprehended due to the destruction of crops through the locusts. So very keen the want becomes that even the king goes out a-begging.

- | | |
|------------------------------|-------|
| (e) পশ্চিমে ধনু নিত্য খর। | |
| পূবের ধনু বর্ষে ঝড়া ॥ | —খনা। |
| (f) বেঙ ডাকে ঘন ঘন। | |
| শীত বৃষ্টি হবে জান ॥ | —খনা। |
| (g) বৎসরের প্রথম ঈশানে বয়। | |
| সে বৎসর বর্ষা হবে খনায় কর ॥ | |
| (h) পৌষের কুয়া বৈশাখের ফল। | |
| ষ' দিন কুয়া ত দিন জল ॥ | |
| (i) শনির সাত সঙ্কলের তিন। | |
| আর সব দিন দিন ॥ | —খনা। |
| ভাত্তরে মেঘ বিপরীত বায়। | |
| সে দিন বৃষ্টি কে ঘোচায় ॥ | —খনা। |
| (j) যদি বর্ষে আগনে। | |
| রাজা যান নাগনে ॥ | —খনা। |

(k) If there be rains in the winter month of Pausa (December-January) the paddy falls off early from the stalk as a result of which so much scarcity prevails in the land that even husks of paddy sell dearly.

(l) If there be rains in the latter part of Magha (January-February) praise be to the king and his happy land as the Ravi crop will grow abundantly.

(m) If there be shower in Falgun (February-March) then the crops 'Chinā' and 'Kāon' are abundantly expected.

(n) If there be drought in the month of Jyaistha (May-June) and heavy rains in Asādh (June-July) surely there will be crops to such a quantity that the earth will hardly be able to sustain the burden.

(o) If it rains in Magha (January-February) the people become very rich as the rains are conducive to the growth of crops.

(p) The drought of Jyaistha (May-June) and the flood of Asādh (June-July) make the land bear abundant crops.

(q) If it rains in Magha (January-February) then even the unfertile uplands will bear ample paddy crop.

(r) If there be showers in Chaitra (March-April) then it is quite favourable to the growth of paddy.

- | | |
|--|--------|
| (k) যদি বর্ষে পৌষে ।
কড়ি হয় ভূষে ॥ | —খনা । |
| (l) যদি বর্ষে মাঘের শেষ ।
ধন্য রাজা পুণ্যদেশ ॥ | —খনা । |
| (m) যদি বর্ষে ফাল্গুনে ।
চিনা কাউন দিগুণে ॥ | —খনা । |
| (n) জ্যৈষ্ঠে শুকো আষাঢ়ে ধারা ।
শস্ত্রের ভার না সহে ধরা ॥ | —খনা । |
| (o) মাঘ মাসে বর্ষে দেবা ।
রাজা ছেড়ে প্রজার সেবা ॥ | —খনা । |
| (p) জ্যৈষ্ঠে মারে আষাঢ়ে ভরে ।
কাটিয়া নারিয়া ঘর করে ॥ | —খনা । |
| (q) যদি বর্ষে মকরে ।
ধান হবে টেকরে ॥ | —খনা । |
| (r) যদি হয় চৈত্রে বৃষ্টি ।
তবে হবে ধানের স্থষ্টি ॥ | —খনা । |

(s) If the sky of the full moon night of Kartik (October-November) is cloudless and there is strong wind then the Ravi crop is expected in abundance. Cloud and rains in that night indicate injury to the crop altogether.

(t) In the rainy season, if the weather is cloudy at night and water increases at the time then the paddy crop will be destroyed through excessive water.

(u) If in the rainy month of Asadh (June-July) of any year heavy shower occurs in the ninth quarter of the full moon—there will be drought in that year. If there be very little rain during this month fishes may be had in abundance. If there be moderate rains in that month surely the earth will bear good crops. If in any evening of Asadh (June-July) the sun goes down shedding brilliant lustre then no crop is expected in that year.

(v) If the southern wind blows throughout the month of Asadha (June-July) from the beginning, no doubt the year will see much flood.

- (s) কার্তিক পূর্ণিমা করো আশা ।
 খনা বলে ডেকে শোনরে চাষা ।
 নির্মল মেঘে যদি বাত বয় ।
 রবি খণ্ডের ভার ধরগী না নয় ॥ —খনা ।
- (t) মেঘ করে রাত্রে আর হয় জল ।
 তবে জেন মাঠে যাওয়াই বিকল ॥ —খনা ।
- (u) আষাঢ়ে নবমী শুকুল পথা ।
 কি কর ষণ্ডর লেখা জোখা ॥
 যদি বর্ষে মুন্সল ধারে ।
 মধ্য সমুদ্রে বগা চরে ॥
 যদি বর্ষে ছিটে ফোঁটা ।
 পর্বতে হয় মীনের ঘটা ॥
 যদি বর্ষে ঝিমি ঝিমি ।
 শস্তের ভার না নয় মেদিনী ॥
 হেসে চাকি বসে পাটে ।
 শস্ত দেবার না হয় মোটে ॥ —খনা ।
- (v) পূর্ণ আষাঢ়ে দক্ষিণা বায় ।
 সেই বৎসর বস্তা হয় ॥ —খনা ।

(w) When in one year there will be mist in the month of Chaitra (March-April) and flood in the month of Bhadra (August-September) the death rate of the people will appreciably increase.

(x) The Brahmins, the rains and the flood—all go away on getting 'Dakshinā' (Fees). (There is a pun in the word 'Dakshinā,' In connection with the first it means priestly fees while in connection with the second and third it means the southern wind.) In plain language the Brahmins leave a house after getting their priestly fees while the rain and the flood leave the land of Bengal on the approach of the southerly wind.

Manuring and Curing of Crops :—

The peasantry being accustomed to their work naturally know well how to manure the soil properly for growing good crops and cure them of any malady detrimental to their natural growth by applying various indigenous methods within their easy reach when they are in need of such steps. The law of nature which inculcates what is injurious to human life is conducive to the preservation of plant-life have long been known to them as the expression, "Those things (*e.g.*, rotten cowdung) which injure men cure the plants"¹ clearly illustrate.

The following examples from the 'Khanār Vachan' will show the lines by which the cultivators manure and cure the crops of any disease from time immemorial. In the countryside the indigenous methods are followed with advantage and the knowledge—the outcome of experience of many years—is handed down from father to son.

(a) If some water in which a fish has been washed, are poured at the root of a gourd plant, then the plant will surely be benefited from it.

(w) চৈত্রে কুয়া ভাজে বান।

নরের মুণ্ড গড়াগড়ি বান ॥

—খনা।

(x) বামুন বাদল বান।

দক্ষিণা পেলেই বান ॥

—খনা।

¹ মানুষ মরে বাঁতে, গাছলা মারে জাতে।

—খনা।

(a) লাউ গাছে মাছের জল।

—খনা।

(b) The land which contains rotten paddy as manure is fit for the rearing of chillis.

(c) The smut of corn (paddy) should be thrown into the bamboo-grove. If this is done, the result will be a very rapid increase of the grove. Earth should also be thrown beneath a bamboo grove to serve the purpose of manure.

(d) Betelnut plants require cowdung (liquid manure) as manure for their growth.

(e) When brinjals are attacked by the insects kitchen ashes should be used to counteract them. There is no other remedy better than this.

(f) Palmyra-trees yield fruits after twelve years. They will not do so if their leaves are eaten by cows prematurely.

(g) The banana plants should be grown eight cubits apart. In no case their leaves should be taken away. If this advice is followed there will be no fear of ample subsistence.

(h) Pieces of rotten straw or chips of wood should be used as manure at the roots of arums (ওল).

(i) The edible arums (মান) will thrive if ashes are used at their roots.

(j) The plants 'Māndār' (*Erythrine Fulgens*) should be reared in orchard of the betelnut plants. The leaves of the former falling

(b) ধেনো মাটিতে বাড়ে ঝাল ॥ —খনা ।

(c) শুন বাপু চাষার বেটা । —খনা ।

বাঁশের বাড়ে দিগু ধানের চিটা ॥

দিলে চিটা বাঁশের গোড়ে ।

তুই বুড়া ভুই বেরোবে ঝাড়ে ॥ —খনা ।

* * * * *

(d) গোব্বের গোব্বের বাঁশে মাটি । —খনা ।

(e) বেগুন—ধরলে পোকা দিবে ছাই ।

এস চেয়ে ভাল উপায় নাই ॥ —খনা ।

(f) বার বছরে ফলে তাল ।

যদি না লাগে গরুর নাল ॥

(g) নালে কাস্তে গজেক বাই ।

কলা রুয়ে খেয়ো ভাই ॥

—খনা ।

(h) & (i) ওলে কুটী মালে ছাই ।

(j) শোনরে বাপু চাষার পো ।

হুপান্নি বাগে মান্দার রো ॥

—খনা ।

beneath the latter help the rapid growth of the nuts. This recourse is very effective for the betelnut plants.

(k) Some roots should be cut up if no cocoanut-fruit is forthcoming. If soil mixed up with salt is put at the base of a cocoanut tree then it soon yields fruits. If the smut of corn are used at the roots of a cocoanut plant then not only it becomes very plump in appearance but also bears fruit early.

(l) If the young plants of cocoanut and betelnut are removed from the place where they first were planted then these plants get more strength and grow rapidly. But different are the results with the mango and the jack-fruit trees under similar conditions, as the former will then yield fruits of smaller size and the latter will yield very little fruits.

The following observations of Khana regarding various crops deserve our notice :—

(a) It is the rains which make the soil fit for cultivation—popularly known as *kāḍān*. When the soil is thus made fertile in *Asāḍh*, *i.e.*, June-July, the paddy will not grow adequately. If the soil is made fertile in *Sraavan* (*i.e.*, July-August), the paddy will grow in profusion. In *Bhadra* (*i.e.*, August-September) the late rains will be injurious to

- মান্দার পাতা পল্লি গোড়ে ।
ফল বাড়ে ষট পট কোরে ॥ —খনা ।
- (k) অফলা নারিকেলের শিকর কাটি ।
* * * * *
নারিকেল গাছে দিলে লুণ মাটি ।
শীত্র শীত্র কাটে গুটী ॥
* * * * *
খনা ডাকিয়ে বলে ।
চিটা দিলে নারিকেল মূলে ॥
গাছ হয় তাজা মোটা ।
শীত্র শীত্র ধরে গোটা ॥ —খনা ।
- (l) গে নারিকেল নেড়ে পো ।
আনটুচুরে কাঁটাল ভো ॥ —(i.e. ভোয়া) ? —খনা ।
- (a) আষাড়ে কাড়ান নামকে ।
আবণে কাড়ান ধানকে ॥
ভান্দরে কাড়ান শীষকে ।
আখিনে আড়ান কিসকে ॥ —খনা ।

the growth of paddy. In Aswin (*i.e.*, September-October) the land in spite of its fertility due to the rains will bear no crops.

(b) When there will be enough mangoes growing in one year, paddy will also be growing in abundance. Similarly, when in one year the tamarind will be growing in plenty, there will be excessive flood occurring in the land, during the rains.

(c) If the tuft of paddy is thick then the outturn of paddy will be great. The more wide the paddy plants will be sown the more will be the yield of crop.

(d) Cut the paddy after thirty days from the day when the ear of corn before it shoots from the culm will first begin to develop. When the paddy will first flower cut the corn after twenty days from that time. When the sheafs will bend cut the corn after thirteen days. If a cultivator delays more he will lose.

(e) Water of the rainy season subsides in Kartik (October-November). The less the water in this month the more the paddy.

(f) If the paddy is cut in Agrahayan (*i.e.*, November-December) then full crop is available. If it is done in Pausa (*i.e.*, December-January) even less than half (*lit.* six annas) will be gathered. If it is done in Magha (*i.e.*, January-February) no crop will be found in the field as there will remain only the straw. In Falgun (*i.e.*, February-March) even that will also not be found.

- | | |
|--|--------|
| (b) আমে ধান ।
তেঁতুলে বান ॥ | —খনা । |
| (c) কোল পাতলা ডাগর গুছি ।
লক্ষ্মী বলেন এখানে আছি ॥ | —খনা । |
| (d) সোর তিরিশে ।
ফুলো বিশে ॥
ঘোড়া মুখো তেরো তেনো ।
বুঝে হবে কাটো ধাত্ত ॥ | —খনা । |
| (e) কার্তিকের উন জলে ।
খনা বলে ছুন ফলে ॥ | —খনা । |
| (f) অত্রাণে পোঁটি ।
পোঁষে ছেউটি ॥
মাঘে নাড়া ।
কাঙ্কনে কাঁড়া ॥ | —খনা । |

(g) The light fortnight is conducive to the growth of rice plants provided the field is sloping towards the south. In that case much crop is expected to the satisfaction of the people.

(h) The mustard :—

The proper time for sowing mustard is at the end of autumn. The mustard should be sown very close but its variety, the rape seed (*Sinapis racemosa*) should be sown rather apart.

(i) The pulses :—

The peas (Kalāi) or kidney bean, (*phaseolus mungo* i.e., Mug) may be sown in the same field where mustard was first sown. Both will then grow in abundance to the joy of the cultivator.

(j) The radish - the cotton—the betel (Pān) :—

The ground should be ploughed at least sixteen times to grow the radish. So considerable pains and patience are required for it.¹

Cotton is grown if the ground is ploughed eight times and paddy requires the ground to be ploughed four times only. The betel leaves require no ploughing at all.

(g) ঐশ্বর্য পরে তাঁদের কলা ।
কতক কলা কতক ধলা ॥
উত্তর উঁচো দক্ষিণ কাত ।
ধারায় ধারায় ধাত্তের ধাত ॥
চলে ধান ছুই সত্য ।
মিষ্টি লবে লোকের কথা ॥

—খনা ।

(h) খনা বলে চাঁষার পো ।
শরতের শেষে সরিষা রো ।
সরষে ঘন, পাতলা রাই ।

—খনা ।

(i) সরিষা বনে কলাই মুগ ।
বুনে বেড়াও চাপড়ে বুক ॥

—খনা ।

(j) ঘোল চাষে মূলা ।
তার অর্ধেক তুলা ॥
তার অর্ধেক ধান ।
বিনা চাষে পান ॥

—খনা ।

¹ The soil should be powdered to dust by repeated ploughing (lit. sixteen times) to grow the radish as we learn in the saying of Khana,—“মূলার ছুই ধূলা” i.e. dust is the proper soil for the growth of radishes.

The betel leaves should be planted at the latter part of July and another July should be allowed to pass. At the end of third July one may expect to have plentiful leaves of the plant. So though no cultivation is necessary, caution should be taken to watch the growth of the plant for full two years. Khana further says that betel grows well in a shady place.¹

(k) The Cotton and Jute :—

The cotton plants should remain wide apart in such a way that cotton may be plucked easily standing in the midst of them or the plants may be crossed at pleasure. The jute plants and the cotton plants should not be planted in the same field as the former require sufficient water for its growth while the latter will die out if water reaches them.

(l) The maize :—

Maizes were once sold at a very high price in Bengal. Khana says, "If you want to earn money then sow maizes in the month of Chaitra (March-April)."

(m) Tobacco :—

The soil should be beaten into fine dust before tobacco is planted. Do not plant the little plants very closely and reap the crop not later than December or early part of January at the utmost.

¹ তিন শায়নে পান ॥
পান পেতে শাবনে ।
খেয়ে না ফুরায় রাবণে ॥
* * * * *
বিনা চাষে পান ।
* * * * *
ছায়ায় পান রোদে ধান ।

—খনা ।

(k) নেড়ে নেড়ে কাপাস চাই ।
কাপাস বলে, কোটা ভাই ।
জাতি পানি না যেন পাই ॥
(l) যদি থাকে টাকা কসিবার গোঁ ।
তবে চৈত্র মাসে ভুট্টা রো ॥

—খনা ।

—খনা ।

(m) তামাক বুনে গুঁড়িয়া মাটি ।
বীজ পুতো গুটি গুটি ॥
ঘন ঘন পুতো না ।
পোষের অধিক রেখ না ॥

—খনা ।

(n) The “Aus” paddy requires sandy soil and the jute crop requires viscid soil.

(o) Chilli:—

The chillis should be planted when they are very young. Khana says,—“Let these be planted by October—but if the peasant idly passes away the season and plants chillis so late as in November or in December, the plants become too big and liable to be eaten up by worms.”

(p) Turmeric :—

The turmeric should be planted in Baisakh (April-May), Jyaistha (May-June), when one should not idly pass time in indoor games. Clear the soil of weeds in Asadh (June-July) and Sravan (July-August) and then sow in Bhadra (August-September). If you do not follow this principle you will suffer.

(q) *Arum Indicum* (মান) and sesamum :—

If one desires to have *Arum Indicum* then prepare the ground with a spade. But for growing the sesamum regular ploughing will be required. The white sesamum should be sown in Aswin (September-October) or in Kartik (October-November). The black sesamum should be sown in Falgun (February-March).

- (n) আউশের ভূঁই বেলে ।
পাটের ভূঁই আঁটালে ॥ —খনা ।
- (o) ভাদ্রের আধিনে না রুয়ে ঝাল ।
যে চাষা ঘুমায়ে কাটায় কাল ॥
পরেতে কার্তিক আঘন মাসে ।
বুড়ো গাছ ক্ষেতে পুতিয়া আসে ॥
সে গাছ মরিবে ধরিয়া ওলা ।
পুরিতে হবে না ঝালের গোলা ॥ —খনা ।
- (p) বৈশাখে জ্যৈষ্ঠেতে হলুদ রোও ।
দাবা পাসা খেলা ফেলিয়ে খোও ॥
আষাঢ় শ্রাবণে নিড়ায় মাটি ।
ভাদ্রেরে নিড়ায় করহ খাঁচী ॥
অস্ত্র নিয়মে পুতলে হলদি ।
পৃথিবী বলে তাতে কি ফল দি ॥ —খনা ।
- (q) কোদালে মান তিলে হাল ।
কাতেন ফাকার মাসে কাল ॥ —খনা ।

(r) *Trichosanthes dioeca* (পটোল) :—

One should sow the above vegetable in a soil which is sandy. This vegetable will then grow abundantly.

(s) The esculent root or the arum (ওল) should be sown in the hot month of Falgun (February-March) as otherwise it will be as worthless as the wild arum. It should not be sown in a shady place as in that case it will taste bad causing an itching sensation. But in one sense the producer will gain as it will be very big in size so fetching better price. The roots of another kind of esculent root (কচু) when sown by the river-side, will have a proper growth (*lit.* three cubits in length).

(t) *Cucurbita lagenaria* :—

The long-gourd plants (*Cucurbita lagenaria*) should be reared in that part of a house where ashes are thrown, and the chilli plants should be grown in the courtyard.

(u) The brinjals :—

The brinjals (*Solanum Melongena*) may be sown throughout the year save and except the Bengali months of Baisakh and Jyaishta (April-May and May-June).

(v) If the cocoanut fruits are plucked every now and then, fruits may be had in larger numbers. Quite opposite is the principle

- (r) শুন্থে বাপু চাষার বেটা ।
মাটির মধ্যে বেলে বেটা ॥
তাতে যদি বুনিস পটোল ।
তাতেই তোরা আশা সফল ॥ —খনা ।
- (s) কাক্তনে না রুয়ে ওল ।
শেষে হয় গাও গোল ॥
ছায়ার ওলে চুলকার মুখ ।
কিন্তু তাহে নাহি হয় দুখ ॥
নদীর ধারে পুতলে কচু ।
কচু হয় তিন হাত নীচু ॥ —খনা ।
- (t) ছায়ে লাউ উঠানে ঝাল ।
করো বাপু চাষার ছাওয়াল ॥ —খনা ।
- (u) বলে গেছে বরাহের বো ।
দশটি মাস বেগুন রো ॥
চৈত্র বৈশাখ দিবে বাদ ।
হবে নাই কোন বিবাদ ॥ —খনা ।
- (v) দাতার নারিকেল বখিলের বাঁশ ।
কমে না বাড়ে বারো মাস ॥ —খনা ।

with the bamboo grove. The less the bamboos are cut down the more will be the growth of the grove.

(w) The Bananas:—

Among the fruit-trees the banana plants like the cocoanut trees occupy a prominent position. In fact very great interest centres round the banana plants. Every Bengali house whether Hindu or Mahomedan almost invariably possesses some banana plants. These are useful in every way like the cocoanut trees. The bananas are taken with relish by all classes of people. The plant's skin is burnt to form ashes for cleaning purposes in the place of soaps, in the countryside. The plant is held auspicious during religious and festive occasions when they are placed before the principal doorways.

From a perusal of the "Khanār Vachan" it seems apparent that with the banana plants people carried on a lucrative profession in the past.

¹ The bananas should be planted by the mother and her sons. (It should not be left to other hands who may do the work carelessly.) If no less than three hundred and sixty plants are grown, then one need not be anxious for the maintenance of his family. One should not cut the leaves from the young plants. It will then yield abundant bananas to supply both the food and the clothing of

¹ (w) কলা লাগাবে মায়ে পুতে ।
কলা লাগিয়ে না কাটো পাত ।
তাতেই কাপড় তাতেই ভাত ॥
কলা রুয়ে খেয়ে ভাই ,
তিন শত ষাট ঝাড় কলা রুয়ে ।
থাক গৃহী ঘরে শুয়ে ॥
রুয়ে কলা না কাটি পাত ।
তাতেই কাপড় তাতেই ভাত ॥
ফাস্তনে এঁটে ।
পোত কেটে ॥
বৈধে বাবে ঝাড়কি ঝাড় ।
কলা বহিতে ভাঙ্গবে ষাড় ॥
ডাক ছেড়ে বলে রাবণ ।
কলা রোবে আষাঢ় আঁধার ॥
রবি বটে খাবিনে ।
কলা তলায় খাবিনে ॥
লেগে বাবে ভয়ে ।
কলা পড়বে শুয়ে ॥

the householder. Cut the thick banana root and plant the same in rows in the month of Falgun (February-March). Then plants will grow from the offshoots in large number yielding a large quantity of fruits. The time for planting is the rainy months of Ashadh (May-June) and Sravan (June-July).

According to some these two months (Asadh and Sravan) are not the proper time to plant the banana trees, as in that case the worms will eat them up. So these two months are to be avoided. The best time for planting bananas is the month of Falgun (February-March). Then the trees will yield monthly fruits.

In every case of orchard making it is essential that the banana plants should be grown first.

Paddy (*Oryza sativa*) :—

The staple crop of Bengal being paddy it requires more than a passing notice. The types of paddy were so numerous that it is difficult to exhaust all the names. Still an attempt is being made here in this direction. Ramai Pandit's statement that the species of paddy are no less than "a thousand in number," though seems to be exaggerated, is nevertheless true.¹

বদি রোপ কাঙ্ক্ষনে কলা ।

তবে হয় মাস মঙ্গলা ।

* * * * *

আগে পুতে কলা ।

বাগ বাগিচে ফলা ॥

—খনা ।

A list of the fruit-trees that were planted by the Bengalis in the old days, will be found in the description of the Garden-house (Guā-bādi) of Chand the merchant in the Manasā-mangal poems.

¹ For various kinds of paddy with details see Agricultural Ledger, 1910, Nos. 1 and 2 (*Oryza sativa*). See also Gallon's Sanskrit Dictionary and the work named Races of Rices in Bengal. Besides see publications of Commercial Intelligence Department of Government of India, the Viswakosh and such periodicals as the Krisak. See the Sanskrit work ভাবপ্রকাশ. See also the Export Lists of the Port Commissioners, Calcutta.

In the International Agricultural Exhibition of India no less than ten thousand names of paddy were furnished and four thousand specimens shown. In the Museum of Calcutta the authorities have kept four thousand varieties of rice. See for elaborate description of different kinds of paddy the work বঙ্গ চাষতত্ত্ব by Santosh Nath Seth. See also Dr. Watt's Economic Dictionary. See also C. Guha's Bengali-English Dictionary.

The following names of different kinds of paddy are found in the *Gunya Puran* of Ramai Pandit :—

- (1) জৌধান, (2) ছিছিরা, (3) আমলো=Myrabolan, (4) আলাচিত, (5) কফেরি=the black rice, (6) সনাখড়কী=Strawlike, (7) হুগ্গাভোগ=Offering for the Goddess Durga, (8) অগ্নিকল, (9) মুক্তাহার=the pearl necklace, (10) কাল মুগড়=the black club, (11) নাগর যুগ্মন=youthful lover, (12) তুলাশালী=cotton-like sali, (13) অসতি=unchaste, (14) বককড়ী=the white cowry, (15) গৌতমপলাল, (16) পান্ডুসিয়া=the faded, (17) ভাদমুখী=the Bhadoi, (18) তুলসধান=the cotton-white paddy, (19) হুধুরান=milk-white, (20) গুজরা=Gujrati(?), (21) যোআলি=the yoke-shaped, (22) দাড়=the oar-shaped, (23) হাতি পাঞ্জর=the elephant's rib (in hardness?), (24) বুড়া মাত্ত=the ripe Datura, (25) হাটিআ, (26) হটিআ, (27) কআ, (28) তিলসাগরী, (29) লতামৌ=honey of a creeper, (30) মোকলস=the jar of honey, (31) খেজুর ছড়ি=the bunch of dates, (32) পবত জীর=the cumin seed of the mountain, (33) গন্ধ তুলসী=the holy basil (*Ocimum sanctum*), (34) দলাগুড়ি, (35) বন্ধী=the prisoner, (36) বাশ গজা, (37) সীতালালি=the sali rice bearing the name of Sita, (38) হকুলি, (39) হরিকালী, (40) কুমুম শালি=the sali rice resembling the beauty and scent of a flower, (41) রক্তশাল=the red sali, (42) চন্দনশাল=the sandal-scented sali, (43) রাজদল=the vanquisher of kings, (44) উড়াশালি=the flying sali (due to lightness), (45) বিন্দুশালি=the sali rice of the Vindhya region, (46) লাউশালি=the sali rice resembling a long-gourd, (47) আজান-সিঅলি, (48) কালাকান্তিক=the black beauty, (49) মেঘী=resembling the shrub *Trigonella foenugraecus*, (50) খীরকষা, (51) পছাল, (52) রসজঅ=best taste, (53) কামদ=Bestower at will, (54) খুদহুধুরাজ=tiny milk-white grains, (55) জভনা=coming from Java (?), (56) বাঁকই=the bent, (57) মূলা=the radish, (58) পিপীড়া=the ant, (59) ককটি, (60) মাধবলতা=the madhavi creeper, (61) বেগুনবীচি=the brinjal seed, (62) কোটা মেটা, (63) রায়গড়=coming from Raigarh(?), (64) তোজনা, (65) আরবোর, (66) কোঙরভোগ=a prince's meal, (67) জলারান্নি=the rice which makes the water red (perhaps after being boiled), (68) কনকচোর=yellow-coloured (*lit.* Thief of gold), (69) লাল কামিনী=the red-complexioned girl, (70) শোল পনা, (71) পাচ্ছাভোগ=the offering for the Padishahs (The Emperors), (72) বুধি, (73) আজানা লক্ষ্মী=the unknown prosperity, (74) বাঁশমতী, (75) পশী, (76) কঁওদ=bestower at will, (77) গন্ধমালতী=the flower

Gandhamalati (perhaps for similarity in smell), (78) আমপান, (79) গয়াবালী=the sand of Gaya, (80) পাথরা=stony, (81) মাসিলোট, (82) বিজাশাল=the sali rice resembling *Luffa acutangula*, (83) সমধুন, (84) সুআসন=the comfortable seat, (85) টাঙ্গন, (86) হরি=bearing the name of the god Hari (Vishnu), (87) মহীপাল=Mahipal (the celebrated Pāla king?), (88) বাঁকশাল=the bent sali rice, (89) মঙ্গলন=the bestower of bliss, (90) বাঁকচোর=the bent-bodied thief (means Srikrishna), (91) পূবান=the Eastern, (92) বিড়ি, (93) গৌড়ি=the snail, (94) গোপাল=Gopal (the well-known Pāla king?), (95) হড়া, (96) বাঁশকাটা, (97) মরিচ=*Vangueria spinosa*, (98) অজয়=the unconquerable, (99) আমল, (100) পলিএ, (101) দাঅ=obligation, (102) বিড়া, (103) বয়, (104) লাভ.

In Rameswar's Sivayana we find the following names :—

(1) হরিশঙ্কর=the gods Hari-Har in union, (2) হাতিপাঞ্জর=elephant's ribs (meaning hard?) (3) হড়া, (4) হরকুলি, (5) হাতিনাদ, (6) হিঞ্চি=*Hingstha repens*, (7) হলুদগুড়া=the turmeric powder, (8) কেলেকান্ন=the black-complexioned Krishna, (9) কেলেকজীরা=the black cumin seed, (10) কালিয়া কাক্তিকা=the black beauty, (11) কয়কচ্চা, (12) কানীফুল=the Kasi flower (white?), (13) কপোতকাক্তিকা=the neck of a pigeon, (14) কালিন্দী=the dark Jumna (in colour), (15) কটকী=the rice of Katak, (16) কুম্মশালী=the flowerlike sali, (17) কনকচূড়=the golden pinnacle, (18) দুধরাজ=milk-white, (19) দুর্গাভোগ=the offering for Durga, (20) পর্দেশী=joreign, (21) ধুতুর=the Datura, (22) কৃষ্ণশালি=the black-coloured sali, (23) কোঙরভোগ=the offering for a prince, (24) কোঙর=the kumara, (25) পূর্ণিমা=the night of the full moon, (26) কন্টীলতা=*Convolvulus repens*, (27) কনকলতা=the golden creeper, (28) কানোদ=the oblation of water, (29) গরিমা=the pride, (30) খেজুরখুপী=the bunch of dates, (31) খয়ের শালি=the catechu-coloured sali, (32) ক্ষেম=the prosperity, (33) গঙ্গাজল=the Ganges water, (34) গয়াবালি=the sand of Gaya, (35) গোপালভোগ=the offering for Gopal, (36) গৌরীকাজল=the collyrium for Gauri, (37) গন্ধমালতী=the sweet-smelling flower Gandhamalati, (38) গুয়াখুপী=the bunch of betels, (39) গুণাকর=the mine of good quality, (40) চামরঢালি=the expanded chowri, (41) চন্দনশালি=the sandal-scented sali, (42) ছত্রশালি=the umbrella-like sali, (43) জটাশালি=the matted lock-like sali, (44) জগন্নাথ ভোগ=the offering for the god Juggernath, (45) জামাইলাড়=the ballshaped sweet-meat for a

son-in-law, (46) জলারঙ্গী=the rice which makes the water red (when boiled ?), (47) রিকশালি=the sali rice resembling a *Luffa acutangula* in appearance, (48) বলাইভোগ=the offering for Balai, (49) ধুত্ৰা=the resin-scented, (50) নিম্বুই=the rice resembling the fruits of *Melia azadirachta*, (51) নন্দনশালি=the sali rice fit to be the product of the heavenly garden Nandana, (52) রূপনারায়ণ=Rupnarayan, (53) পাতলাভোগ=the offering for an Emperor, (54) পাখরারস=the pigeon-coloured, (55) পিপীড়াবাক=the small rice resembling the bent figure of ants, (56) তিলসাগরী=the rice resembling the oil-seed *Sesamum orientale*, (57) বাঁকশালি=the bent sali, (58) বাকইবুয়ালি, (59) দারংঙ্গী=pertaining to Dwarbhanga, (60) বাঁকচুর=the bracelet Bunkchur (in resemblance), (61) বুড়ামাত্রা, (62) রামশালি=the big sali, (63) রঙ্গী=the red-coloured rice, (64) রান্ধাঘেটে=the ochre-coloured earth (in colour), (65) রামগড়=pertaining to Ramgarh, (66) রণজয়=victory, (67) লক্ষ্মীপ্রিয়=the favourite of Lakshmi (the Goddess of fortune), (68) লাউশালি=the sali rice resembling the shape of a long gourd, (69) লক্ষ্মীকাজল=the collyrium for the eyes of Lakshmi, (70) ভোজন=eatable, (71) ভবানীভোগ=the offering for the Goddess Durga, (72) ভুবনউজ্জল=the brightness of the world, (73) সীতাশালি=the sali rice bearing the name of Sita, (74) শঙ্করশালি=the sali rice bearing the name of the god Siva, (75) শঙ্করজটা=the matted hair of the god Siva (in resemblance).

In the two lists as given here some names are common. These lists are surely not exhaustive and there are many other names not touched by the two poets. But they are quite adequate in helping us to form an idea. Many of the proper names are of course meaningless, such as Chhichbirā, Kakachi, Alāchita, Kayā, Hutiyā, Tojnā, Bukhi, Bākai-Buāli, Kaikachhā, etc. With the growth of a classical taste and fondness for using ornate language, the names were picked up from poetical vocabularies and became refined and suggestive. Besides these, there are other names such as Gujurā (Gujarati), Gayābāli, Pardesi (foreign), Katakī, Ramgar, Dwārbangi, Javna (coming from Java), and others which distinctly point to the fact that many of the types of Bengal paddy had their origin in foreign soil. There are some other names which are poetic. These were Mukṭā-hār=a pearl-necklace, Nāgar-yuān=a youthful lover, Kapot-kanthikā=the neck of a pigeon, Lakshmi-priya=the favourite

of the goddess of Fortune, Rana-jaya=victory, Lakshmi-kājal =the collyrium for the eyes of the goddess Lakshmi, Kanakchud =the golden pinnacle, Bhuban-ujjal=the brightness of the world, etc. Again, there were some names which perhaps denote the type or connote the qualities of the different classes of paddy. The following may be mentioned by way of illustration. Kelejirā =the black cumin seed, Kāsiphul=the white Kāsi flower, Dudhrāj =milk-white, Krishna-sali=the black-coloured sali, Kusum-sali=the flower-like sali, Khejur-thupi=the bunch of dates, Chāmar-dhāli=the bent-chowry, Jhinga-sali=the sali resembling a *Luffa acutangula*, Rāngi=the red-coloured rice, Lau-sali=the sali rice resembling a long gourd in shape, Rāngā-mete=resembling the ochre-coloured earth in colour, etc., etc.

The sweet smell which some kinds of rice possessed such as Benā-phul,¹ Bānsmati, Bānsful, Golāpkhās, Kāmini, etc., as is understood by their names and some types which are still extant in North Bengal lead us to hazard the conclusion that there were perhaps elaborate methods and scientific processes to develop types of paddy possessing particular scents. We know of a kind of plant known to the Bengalis as Rādhuni-pāglā and to the English as "Rice-Scent." It resembles the pine-apple plant and is available in any common nursery. If two or three leaves of this plant are thrown into the pot in which rice is being boiled then it will possess the sweet scent of the Arabian jasmine. With all our efforts we have not been able to find out various processes in this connection but we think the period of reign of the Pāla kings of Bengal was very favourable for the purpose as certain kinds of paddy are still known by the names of Mahipal and Gopal, the two most famous kings of the Pāla dynasty of North Bengal. It was quite possible to develop paddy into a certain scented type when we see that it is possible to develop fruits and flowers in a particular way according to the present-day scientific methods.

The two lists already mentioned have been taken from Ramai Pandit's Çunya Purana and Rameswar's Sivāyana. After careful

¹ "Benāphul" is extremely sweet-scented resembling the nice scent of Khus-Khus flower. It is grown abundantly in Hooghly, Burdwan, Faridpur, Jessore, Howrah, 24-Parganas and Murshidabad Districts.

enquiry it has been found that some of these paddies are cultivated even now in various parts of Bengal and are important enough to be noticed by the Department of Agriculture, Bengal.

A few of these paddies are mentioned below :—

(i) Parbatjirā.—It is a well-known paddy of Malda and the neighbouring Districts. It is aman paddy.

(ii) Bādhsābhog.—It specially belongs to the District of Burdwan and is also grown in many other districts such as Bankura, Hooghly and the 24-Parganas. It is fine aman like Dādkhāni and as the name signifies was once a favourite of the aristocracy.

(iii) Nāgrā (Nāgar-yuān).—It is grown in many of the Districts of Bengal such as Bankura, Hooghly and Burdwan. It is of two types—Nāgrā I and cultivator's Nāgrā. The former has been tried by various Government Agricultural farms and is decidedly the better of the two. The cultivator's Nāgrā is aman of the medium type.

(iv) Elāi (Elāchitā?).—Elāi is perhaps the same paddy as Elāchitā described by Ramai Pandit in his Ġunya Purān. Elāi is the local paddy of Hooghly, Malda and Rajshahi Districts. It is aman paddy. It is also found in some quantity in the Mymensingh District where it is known as Elāich.

(v) Kayā (Kaikachhā?).—A very inferior type of paddy. Its use is restricted to poor people. It is found in some parts of West Bengal, chiefly in the District of Burdwan and partly in the District of Bankura.

(vi) Hookooli (Hoorkosāli?).—It is grown in Bankura and the surrounding Districts. It is of the aman class, big in size and ordinary in quantity.

(vii) Madhablatā (Mādhabi?).—Mādhabi is aus paddy of the Mymensingh District (Kishoreganj side). It is of ordinary quality.

(viii) Gopālbhog (Gopāl?).—Gopālbhog is fine aman paddy of good scent and belongs to many Districts of Bengal, such as, Murshidabad, Burdwan, Noakhali, Bankura, Malda, Mymensingh, Backerganj, Dacca and Dinajpur. It is fine aman. We think the name has connection with the celebrated Pāla king of the same name. In Murshidabad it is of the aus kind.

(ix) Jhingāsāl.—It is grown chiefly in the District of Backerganj, Murshidabad, Bankura, Nuddea, Jessore, Pabna, Midnapur, Faridpur, Hooghly, Birbhum, Burdwan, Malda and Rajshahi. Besides it is grown in Hazaribagh, Lohardanga, and the Southal Parganas outside Bengal. It is both coarse and fine aman. It is known as Bada-jhingā in Bankura side.

(x) Marichbuti (Marich).—It chiefly belongs to the Rajshahi District. It is aus paddy and is of medium quality. Perhaps Marichbuti is the same as Marich paddy of our old literature.

(xi) Kataktārā (Kataki ?).—It belongs to the various localities such as Hooghly, Dacca, Barisal, Mymensingh, Rangpur, Bogra, Comilla, Jessore and Murshidabad. The paddy is known at Dacca as Dacca No. 2. It is aus paddy. The Agricultural Department of Bengal has taken this paddy as the best producing type of its class as it has taken Indrasāl among the aman paddy. Kataktārā is produced in various Districts though many of them are wide apart from one another. Kataktārā is taken as the departmentally improved rice. "In Eastern and Northern Bengal.....Indrasāl, Dudsar and Kataktārā are capable of giving about one maund a bigha more than the local cultivator's seed. In 1922, it was estimated that the area under these varieties was about 363,000 bighas." ¹ It has kept up its reputation and is expanding specially in Nadia which is mainly an aus-growing tract." ² "It is a highland broadcast paddy which is becoming very popular in Eastern and Northern Bengal (excepting the neighbourhood of Rajshahi) as well as in the Presidency Division." ³ Dacca No. 2 Kataktārā is a medium-fine highland aus and late-ripening paddy which does best on fertile high-land with plenty of moisture and in rotation with a rabi crop. It is not so suitable for double-cropped paddy land." ⁴

¹ Bulletin No. 2 (Agricultural Department, Bengal), dated the 6th January, 1925.

² Agricultural Report Demonstration, Presidency Division, 1924-25.

³ Botanical Section Report, Agricultural Department, Bengal, 1924-1925.

⁴ Bulletin issued by the Director of Agriculture, Bengal, dated the 6th January, 1925.

(xii) Ramsāli.—It is native to the soil of Bankura. It is aman in type and is best among the different sali varieties of paddy such as Lakshmansāli, Gourāngasāli, Dudhsāli and Hoorkosāli obtainable in the District of Bankura.

(xiii) Kalmilatā (Kalamtāl or Jātkalmā).—Jātkalmā is the local paddy of Hooghly and Burdwan Districts. It is aman paddy. Perhaps it is the same as Kalmilatā of our old literature and Kalamtal of Maldah.

(xiv) Kanakchud.—It is aman paddy and is cultivated mainly in the localities of Bankura and Malda. The fried paddy (khai) from Kanakchud is round in shape and very fine to taste. It also smells very sweet.

(xv) Dudhkalmā (Dudhrāj ?).—It is cultivated in many Districts such as Bankura, Hooghly and Burdwan. It is both aus and aman. As aus it is grown in Dinajpur side. As aman paddy it belongs to the fine class. It is a heavy yielder and is the best paddy among fine aman type of West Bengal as the varietal test at the Government Chinsurah farm has shown in 1924-25. We cannot definitely say if Dudhkalmā is the same paddy as the Dudhrāj of the old Bengali literature. But we think both the names refer to the same kind of paddy. The name Dudhrāj seems to indicate fine paddy with milk-white colour.

(xvi) Kelejirā.—It is fine aman paddy cultivated in many of the Districts of Bengal. In Bankura District it is cultivated as medium type aman.

Besides the above there are other paddies grown in various parts of our province ; some of these have evidently changed their names or are known differently in different parts by local names—so that they do not always agree with the names given in our literature so far as I have explored it. Here follows a list of some of them :—

(i) Dudhsar.—It is grown in many Districts, such as, Maldah, Rajshahi, Hooghly, Dacca, and Mymensingh. It is coarse aman. It is similar to Dacca No. 1, but ripens about a week earlier. For this reason it is more suited for lighter soil and higher situation. It is an important paddy. According to the Botanical investigation of the Agriculture Department, Bengal (1924-1925)—" Dudhsar is a race

of transplanted paddy which is nearly as heavy a yielder as Indrasail but which matures nearly a fortnight earlier. It has done very well in the Bahrind tract in Malda where it is now being cultivated on some thousands of bighas and where it is likely to extend largely."

(ii) Dudhsali.—This paddy belongs chiefly to the locality of Bankura. Its quality is not very good. It is rather coarse aman of medium type and is not much favoured by people.

(iii) Sindurmukhi.—It is native to the soil of Bankura and Birbhum localities. In Maldah a variety of it is known as Sonāmukhi. It is aman paddy and ripens early. An acre can yield $17\frac{1}{2}$ mds. of Sindurmukhi paddy at Suri if carefully grown. The paddy looks red like vermillion on its tip and is therefore so-called (*lit.* Vermillion-tipped).

(iv) Hātisāl.—It belongs to the District of Hooghly and some other parts of West Bengal. It is aman paddy.

(v) Hatipānjar.—A very coarse kind of aus rice consumed by poor people of various localities of Bengal.

(vi) Tilakphul.—It is produced in certain Districts such as Malda. At Dacca there is a kind of paddy called Tilakkachāri which we suggest may have some connection with Tilakphul. Tilakphul is aman in kind.

(vii) Gourāngasāli.—It is paddy of Bankura and other Districts and aman in type. It is of medium quality.

(viii) Dādkhāni.—It is the paddy of Bankura, Maldah, Rajshahi, and Dacca Districts. It is aman in kind and very fine in quality. It is equal in quality with Badshabhog and Kataribhog paddies which are also very fine aman. In the varietal test at the Chinsurah Government farm (1924-25) Dādkhāni did best among the three by way of maximum production in a certain plot of land.

(ix) Bhramarkāndi.—It belongs chiefly to the Districts of Burdwan Division such as Bankura. The coating of the paddy is red and it is aman (?) in kind.

(x) Donārgudā.—It is aman paddy of Bankura side and possesses a very fine smell. It is very fine in quality for which it has great reputation in the locality.

(xi) Chatuinakhi (*lit.* the talon of a sparrow).—It is very fine aman—even more fine than Donārguḍā. It belongs, among many places, to the locality of Bankura. It is so called because in fineness and shape it resembles the small talons of a sparrow.

(xii) Nonā.—This paddy is of ordinary quality and is cultivated in many Districts of West Bengal. It is aman paddy.

(xiii) Kathiānonā.—It belongs to various District of West Bengal such as Bankura. Its rice is reddish in colour. It is very sweet and soft to taste.

(xiv) Lakshmansāli.—It is grown in Bankura and various other Districts of Burdwan side and is aman in type. It is medium in quality.

(xv) Newāli.—It is aus paddy of West Bengal. The rice is ordinary in quality.

(xvi) Bādkalamkāti.—It is grown in West Bengal. It is aman paddy and is of ordinary quality.

(xvii) Barankalamkāti.—It is aman paddy mainly of Burdwan Division. It is also of ordinary quality.

(xviii) Mahipāl.—It is aman rice of green colour and rather sweet to taste. It possesses long grain.

(xix) Indrasāil.—Indrasāil is now the chief aman paddy—though not the very best—throughout Bengal. It does not thrive well in uplands as it is a paddy essentially of lowlands. The Government farms at various centres are carrying on experiments with it. The following observations of the Botanical Section of the Agriculture Department, Bengal (1924-25), will be of interest to the readers.

“The investigation into paddy continues to occupy practically the whole of the time of Dr. Hector and his staff. Careful experiments done at several centres indicate that when the soil moisture is likely to last beyond the beginning of December, Indrasāil as a transplanted paddy, is likely to be supreme. These results apply at centres as far apart as Chinsurah, Rajshahi, Rangpur and Dacca. On the lower terraces of the slopes Indrasāil gives a heavier yield than local paddies. At Rajshahi in plots duplicated five times over three successive years the average yield of Indrasāil was three

maunds twelve seers per acre better than the best local rice tried against it." While at Burdwan the maximum production was 37 mds. 10½ seers per acre (1924-25). "At Dacca a special test was conducted of Indrasāil against the local seed of Mālātī, the standard paddy of the Dacca District. This resulted in an increased yield in favour of Indrasāil of 25 per cent. 2·19. There is little doubt but that, where conditions are suitable, Indrasāil will hold its own against any of the standard local paddies in East and Northern Bengal. In trials conducted at Chinsurah now for five years it has beaten local Nāgrā by an average of 2 mds. 34 seers of grain per acre, and 9 mds. 7 seers of straw; and at Rajshahi in trials conducted for three consecutive years, it has beaten the standard local paddy by 2 mds. 12 seers."¹

Thus it is clear Indrasāil is a transplanted aman paddy and thrive well in the lowlands of Dacca, Rajshahi, Bankura, Jessore, etc. Its outturn is greatest in all places of Bengal against local aman paddies and the Government farms have proved it. But it is not of the finest quality—rather it is coarse aman. If we divide the most prominent aman paddies of Bengal into three classes we shall see Dādkhāni, Bādsābhog and Kātāribhog belong to the finest group; Nāgrā, Bhāsmānik and Kājālsāil belong to the medium group; and Dudsar, Jhingāsāil and Indrasāil belong to the coarse group. Of all these aman paddies, as have been said already, Indrasāil is the heaviest yielder and have beaten down the local aman paddies of various districts in this respect. Thus Indrasāil has proved its superiority by way of output over Nāgrā I and cultivator's Nāgrā of Hooghly, Gāziā and Elāi of Rajshahi, Nāgrā, Jātkalmā and Dudkalmā of Burdwan and other paddies.

(xx) Manikkalmā.—Kalmā is aman paddy and is grown in various Districts of Bengal. There are varieties of Kalmā paddy such as Manikkalmā, Dudhkalmā, Kartikkalmā, Nilkalmā, etc. Manikkalmā is grown chiefly in the District of Birbhum.

(xxi) Bhāsmānik.—It is a West Bengal paddy. It is aman paddy of medium quality.

¹ Testing of Indrasāil against the best local paddies. (Report of the Agriculture Department of Bengal, 1924-25.)

(xxii) Kājalsāil.—It is a medium aman of Hooghly-Chinsurah side. It is somewhat better than Indrasāil in quality but yields less in quantity.

(xxiii) Kātāribhog.—It is a fine aman specially of Maldah and Hooghly side. Its quality is the same as that of Dādkhāni and Bādsābhog. The rice is extensively taken all over Bengal.

(xxiv) Rādhunipāgal.—It is West Bengal aman chiefly of Burdwan, Nuddea and Murshidabad side. It is aman of very good quality. Its very name which means—"The cook runs mad" (for its excellence and fragrance) shows its fine quality.

(xxv) Joshābālām.—It belongs to the localities of Rajshahi and Hooghly. It is aman paddy.

(xxvi) Gāziā.—It is aman paddy and extensively grown in various districts such as Rajshahi, Hooghly and Mymensingh. It is fine aman. In Mymensingh side it is popularly known as Gāinjā.

(xxvii) Suryyamukhi (*lit.* the Sunflower).—It is otherwise known as Dacca No. 4. It is medium fine aus and is grown in highlands. It is similar to Kataktārā and is originally grown in the Districts of Burdwan, Backerganj and Nuddea.

(xxviii) Chārnoek.—It is also known as Dacca No. 6. It is cultivated mostly in Jessore and Murshidabad localities. It is highland aus and is of a very fine quality and suited to lighter soil. It ripens earlier than Kataktārā (Dacca No. 2) and Suryyamukhi (Dacca No. 4).

(xxix) Mālāti.—It is the local aman of Dacca District and is a very popular paddy. Its production is great and only inferior to Indrasāil in this respect.

(xxx) Bānsphul.—It is aman paddy of fine quality. It is cultivated in many localities of Bengal.

(xxxi) Jethi.—It is aus paddy of Maldah side. "The Bhādoi rice Jethi is sown in May and reaped in August—September; but a variety of sixty-day rice known as Jethi is sown in small quantities in April in the Ganges diara in the mud at the edge of the river and reaped in June before the river begins to rise."¹

¹ See Maldah Gazetteer, p. 41.

As for the two principal types of paddy, *e.g.*, "*aus*" and "*aman*," two lists are furnished below to show as these are cultivated on the whole in various districts of Bengal :

Districts	<i>Aus</i> Kinds	<i>Aman</i> Kinds
Burdwan	10	34
Birbhum	70	28
Hooghly	10	21
Howrah	4	12
Midnapur	16	31
The 24-Parganas	35	24
Bankura	10	18
Nuddea	20	40
Murshidabad	15	22
Jessore	14	62
Khulna	18	27
Dacca	22	30
Mymensingh	4	21
Faridpur	14	15
Backerganj	30	90
Tipperah	12	2
Noakhali	6	8
Chittagong	10	14
Rajshahi	6	25
Dinajpur	15	44
Jalpaiguri	5	16
Rangpur	7	2
Bogra	8	22
Pabna	8	27
Maldah	12	15
Sylhet	6	10
Comilla	4	12
The Sundarbans locality	18	42

Difficulties in Agriculture :

Agriculture in alluvial soil has its difficulties. Besides the reclaiming of waste lands and bogs the work of which is never a

pleasant task—tilling itself has many hardships and disappointments inherent in it. Although agriculture was given the first place among the four kinds of life's avocations, as mentioned before, still its dark side too was never ignored. Even the Government of the time had enough to do to shape the prosperity or ruin of agriculture. The following is quoted by way of illustration :—

“It is with great trouble that harvest can be gathered. If there is drought then it is all over with the peasant. If there is good crop forthcoming in any one year, the king is cruel enough to put it to sale for his own benefit at the expense of the poor cultivators. In spite of the good harvest it is not the cultivators who really get the profit—but the king. The peasants till the soil amidst immense sufferings in the mud and bog, and drag on their miserable existence not so much by mixing with the really good men as by coaxing very bad people who are self-seeking to the extreme and are the real masters of the land.”¹

Sometimes flood destroys the crops, thus disappointing the peasantry to a great degree. Thus in Maluā (Mymensingh Ballads) the tale of Chand Benode's sad plight due to excessive inundation, touches our heart. “When the month of Aswin came, the flood remained to such an extent that all the crops went down the water, thus destroying them. This made Chand Benode quite penniless..... In this way Aswin passed by and Kartik came with no better prospectThe miseries of Chand Benode were beyond description. There was not enough paddy in the granary even for the purpose of worshipping the harvest goddess (Lakshmi).”²

Besides the difficulties mentioned above, there were others causing chilling effects on agriculture. The most important thing in this respect is the nature of the soil. Sometimes a marsh full of leeches to be drained and sometimes a jungle to be cleared before ordinary agricultural operations can be carried on. The following lines incidentally give a true picture of the exact condition of the work which is the same even now :—

“When the paddy had grown in the fields it was then required to clear the fields of the weeds. The goddess Durgā became aware

¹ Chāsā-pālā by Rameswar, C. U. MS. No. 2455, F. 3.

See the story of Malua (Mymensingh Ballads, Bengali version), p. 43.

of the intention of the god Siva in this respect and sent the leeches to annoy the great god. The leeches of the smaller type moved on the grass and the bigger ones remained in water with the hope of licking blood of the unhappy victims who would come within their reach. Siva's assistant Brikodara came to the fields in the morning for clearing the weeds and the Lord himself sat on the grassy ridge near by. Both were attacked by the leeches but none of them had the suspicion of these blood-suckers at first.....When they became aware of the situation, they got very much nervous. They found thousands of these leeches sticking to their bodies. With great strength they tried to pull them off but without any appreciable success as the creatures being sleek, every time they pulled them, they slipped out of their hands. Siva, however, then took another recourse which became effective. Beseeched by his servant Brikodara to adopt some means for averting the danger, Siva applied lime and salt all over the affected parts as a result of which, all the leeches discharged blood and were at last killed.¹ The above account inspite of its legendary character gives a true picture of the difficulties faced by the peasantry in agricultural operations up to the present day. In another place of the same work we find "the god Siva (described as a farmer) advising his assistant the method of cultivation. The first step was to weed out the tares with great zeal. Both the master and his servant worked hard and in a very short time planted the seedlings of paddy, raised the ridges and cleared the field of many kinds of wild grass. Both of them laboured in the field from morn till noon daily."²

¹ and ² See the Sivayana by Rameswar.

The custom of working only half-a-day had once the backing of the sastras. It specially recommended this time-limit when one worked with the bull. In the Parasara Samhita we find,

“*হিরাঙ্গ নীকজং তৃপ্তং হৃদয়গুরজিতম্ ।*

বাহ্যৈর্দ্বিষস্তুর্দ্বিঃ পশ্চাৎস্থানং সমাচরেৎ ।”—পরিশর-সংহিতা ৪ | ২

(“An able-bodied bull free from disease, well-fed, hearty, and not impotent should be made to work for half the day. Then should one give the bull a wash.” Of course the practice arose due to the humanitarian principle towards the bovine class.

The above is a genuine picture of the practice of the peasantry even of to-day though the matter has been introduced here as a religious legend. The rain-fall is, of course, a great factor determining the success of agriculture. To the cultivators, according to the time-honoured belief, it is the god Indra, the dispenser of rains, upon whose freaks depend all their hopes and fears. When there is conflagration in an extensive scale in clearing a forest or an excessive drought in the land, the cultivators naturally pray, "Oh Indra, save the creation! Shower the nectary rains so that people may live by cultivation."¹

¹ "ইন্দ্র বজ্রা হর পাড়িল হুঙ্কার।
ছবি টি রক্ষা কর ইন্দ্র হৈল ছায়খার ॥
খীর কুণ্ডর খীর অমর্ত কুণ্ডর পানী।
অমর্ত বরিষণ ইন্দ্র করিল আগুনি ॥"—রামেশ্বরের শিবায়ন

In the Sivayana the function of Indra to shower rains reminds us of many Vedic hymns,

CHAPTER XV.

ECONOMIC CONDITION.

The general condition of Bengali people, so far as can be gleaned from Old Bengali literature, seems to have been generally prosperous during the eleventh and twelfth centuries. A glowing picture of plenty may be found in the Mayanāmatī songs ¹ (11th-12th century). Herein we find that under the paternal rule of Raja Manik Chandra the people enjoyed much happiness. The tax was very low, being only a pice and a half per plough—a month. The householder walked by his own path (leading to the main road)² and each man had a tank in his house. People exposed their wealth without any fear of stealth. The children of even ordinary men played with golden balls.

We find the same story of opulence repeated in another place in a poetry named Gorakṣa-Vijay, wherein we see that there was a city whose inhabitants were so opulent that 'nobody would drink water from a tank not his own. They would dry their valuable gems under the sun (so great was their number).'³ In another

¹ মাণিক চন্দ্র রাজা বঙ্গে বড় সতী ।
হাল-খানায় খাজনা দিল দেড় বুড়ি কড়ি ।
সেই যে রাজার রাইঅত প্রজা দুবখু নাহি পাএ ।
কায়ও মারলি দিয়া কেহ নাহি যায় ॥
কায়ও পুস্করিণীর জল কেহ নাহি খাএ ।
আখাইলের ধন কড়ি পাখাইলে শুকায় ॥
সোণার ভেটা দিয়া রাইঅতের ছাওয়ালে খেলায় । ইত্যাদি
—ময়নামতীর গান ।

See also 'Manik Chandra Rajar Gan' dealing with the same story.

² The public roads were approached by short paths from the village-houses and the owners had full control over them.

³ কার গখরির পানি কেহ নাহি খাএ ।

মণি মাণিক্য তারা রৌদ্রেতে স্থখাএ ॥

place of the same work there is a description of golden houses and of men bedecked with jewellery. They used golden vases for drinking water.¹ In fact in the early literature, specially in the ballads, there are profuse references to golden utensils and articles of luxury, and however hyperbolic the accounts may be there was surely a stratum of truth underlying them.

The old Bengali literature is full of references of articles of luxury. These also point out that the arts and crafts of the country were once of a very high order. Among the innumerable items of luxury we note a few in this place.

There were many exquisitely woven sādīs for ladies of rank. Among them we specially note, the 'Mayūr-Pekham' and the 'Megh-dambur.' The former was perhaps of variegated colour as the name 'Mayūr-Pekham' (*lit.* Peacock's tail) would signify, while the latter Megh-dambur (*lit.* collection of black cloud) would signify the dark colour of the sādī. The mention of these two is found in our old folk-lore. Thus in D. Majumdar's collection of stories we find at one place—

"The princess opened her wardrobe and wore the 'Mayūr-Pekham' sādī. The colour of the sādī brightened her room—its beauty greatly affected her mind."²

১ স্থানে স্থানে দেখে সব অমরানগর ।
সকল নগরে দেখে উচ্চ উচ্চ ঘর ॥
হুবর্ণের ঘর সব পতাকা রচিত ।
সকল দেশের লোক রতনে ভূষিত ॥
রাজ্যের সকল দেখে তার ভাল রঙ্গ ।
প্রতি ঘরদ্বারে দেখে হিরণ্যের টঙ্ক ॥
ধন্য ধন্য রাজনগর করিয়া বাখানি ।
হুবর্ণের কলসে সর্বলোকে খায় পানি ॥

—সেখ ফয়জুল্লা কৃত গোরক্ষবিজয়, পৃ: ৫৫ ।

See also Dr. Sen's বঙ্গভাষা ও সাহিত্য (First ed.), pp. 238-239 and pp. 518-520, for the general condition of the people of the period.

^২ "রাজকন্যা পেটরা আনিয়া ময়ূরপেখম শাড়ী খুলিয়া পরিলেন । শাড়ীর রঙে ঘর উজল, শাড়ীর শোভায় রাজকন্যার মন উতল ।"

—দক্ষিণাবাবুর ঠাকুরমার ঝুলি, শীতবসন্ত, পৃ: ৯০ ।

And at another place—

“The princess had a flowing hair. She was wearing the ‘Megh-dambur’ sālī and sandal besmeared chādar.”¹

Another kind of sālī which had much celebrity in the past was named ‘Āgun-pāṭer-sālī’ (*lit.* sālī made of fire-coloured silk). This we find mentioned among others in ‘Manik Chandra Rajar Gan.’ Thus, “The harlot will use such an exquisite sālī as Āgun-pāṭer-sālī, while you will use a torn and worn out rag.”²

The aristocracy naturally was very particular about their bedsteads or khāṭ otherwise known as Pālāṅkas. They used very costly couches and thus we hear of couches made of gold and precious stones. In one of the folk-story we learn that “in a pair of golden couches the king’s son and his friend, the minister’s son, fell asleep.”³ In another we find the heroine “Mālāñca-mālā lying on a golden couch.”⁴ Yet in another story we come across “a couch which was made of gold having diamond-set handles with garlands of flower on them.”⁵

On a bed two articles of luxury attract our attention. One of them ‘Sital-Pāṭī’ (a kind of mat) though very commonplace was once an article of luxury and was perhaps more exquisitely made than now. The other ‘Indra-kambal’ (perhaps a kind of highly finished blanket) is not to be met with now. References of both are found in Manik Chandra Rajar Gan among other works. Thus a queen of Raja Govinda Chandra when trying to dissuade him from adopting ‘sannyās’ mentioned many articles of luxury to which they were accustomed in their royal palace and which they would

¹ “রাজকন্তার এলোবেশ চুল, মেঘডম্বর শাড়ী, চন্দনরাজ্য চাদর।”

—দক্ষিণাবাবুর ঠাকুরমার ঝুলি, মধুমাল, পৃঃ ২৩।

² বেস্তার পরিধান হব আশুন পাটের সাড়ী।

তোার রাজার পরিধান হব বারগাঁটের দড়ি।

—মানিকচন্দ্র রাজার গান।

³ “সোণার ঝুগল পালকে রাজপুত্র উজীর পুত্র শুইয়া নিদ্রা গেলেন।”

—দক্ষিণাবাবুর ঠাকুরমার ঝুলি, মধুমাল, পৃঃ ১৭।

⁴ “সোনার পালকে মালকমালা,”—

—দক্ষিণাবাবুর ঠাকুরদাদার ঝুলি, মালকমালা, পৃঃ ১৩৬।

⁵ “সোণার খাটে হীরার ডাঁট, হীরার ডাঁটে ফুলের মাল! দোলায় রহিরাছে,”—

—দক্ষিণাবাবুর ঠাকুরমার ঝুলি, ঘুমন্তপুরী, পৃঃ ৫৮।

all lose if he gave up his worldly fortunes. Among these articles we also find the name of 'Śītal-pāṭī.' She says, "I shall spread for you on the bed a Śītal-pāṭī.¹ In the same story at another place, the harlot Hīrā² is given the credit of knowing the art of bed-making by placing a mattress three feet high and spreading over it a Śītal-pāṭī; she used to cover it with a valuable blanket called the Indra-kambal. It seems from the above that even rich ladies knew the art of making bed as they knew the culinary art.

In Gorakṣa-Vijay, we find, curiously enough, that people sometimes indulged in luxury even in such a thing as the sacred thread along with sticks and umbrellas, if any credence can at all be put on such poetic effusions. Thus,—

"You must request him (the architect-god Visva-karmā) to make on my behalf sacred thread made of gold. Besides cowries, cane, umbrella and stick—all should be made of gold for my use."³

In Manasā-maṅgal poems of a later age we see a merchant⁴ using golden slippers before going to bed. It seems shoes were very rare at one time in this country as sandals were more in use. The Dharma-maṅgal poems mention velvet shoes.⁵ Although these two poems were written in the Mahomedan period still in certain manners and customs we believe they refer to the previous Hindu period.

¹ "শীতল পাটী বিছাইয়া দিমু"—

—মানিকচন্দ্র রাজার গান।

² "বিছানা করিতে নটী ভাল জানে।
সাঁটার উপর পাটী বিছায় এক বুক উছল।
তার উপরে ফেলাইয়া দিল ইন্দ্রকমল ॥"

—মানিকচন্দ্র রাজার গান।

³ "তান ঠাই আন্ধার কহিবা কার্জ্য কথা।
সোণার নগণ মোরে গড়ি দিতে পৈতা ॥
হুবর্ণের ত্রিকড়ি দেউক হুবর্ণের ছড়ি।
হুবর্ণের ছাতি দেউক হুবর্ণের লাতি ॥"

—গোরক্ষবিজয় (সেধ কয়জুলা) পৃ: ৪৯-৫০।

⁴ See Manasā-maṅgal poems by Baṁsīdās.

⁵ See Dharma-maṅgal poems by Ghanarām.

Among the rest the names of the following may not be out of place.¹ These were মূঠ শঙ্খ, স্তবর্ণ কাটারী, শোনালা চান্ন, গঙ্গাজলি সাড়ী, চটক ধুতি, মটক ধুতি, স্বর্ণখাল, স্বর্ণবাটী, স্বর্ণপিড়ী, দণ্ডপাখা, etc., etc.

Our folk-lore and Manasā-maṅgal poems give us glimpses into the economic condition of the country in full details. We may reject some of these as exaggerated but there is a good deal in these accounts which will stand a historical test.

A fascinating picture is given of Madhumālā who awakes from sleep by the spell cast upon her by the fairies in the middle of the night and taking it to be the dawn of the day, thus muses within herself: "I wonder if it is morning, why then does not the bird sārī sing its gay note in its cage as is its wont? If it is morning why do not the cymbals sound on the busy feet of maid-servants? And why do the three long rows of lamps fed by clarified butter still burn in my compartments?"² The princess Madhumālā is described as sleeping on a golden couch decorated with diamonds and pearls, the cushion spread over it being prepared with thirteen varieties of rich silk.

The people of Bengal once had extensive oversea-trade as evidenced from stories of the Manasā-maṅgal poems and the Chanḍī-kāvya. The merchant-class seem to be very influential as described in these works and they brought untold wealth from distant lands. Our folk-literature inspite of exaggerations also supports the idea and Dakshina Babu's collections, e.g., Thākurmār Jhulī and Thākurdādār Jhulī, are full of these stories. In the latter works we find the names are given to individuals more in honour of the precious gems and gold rather than in the name of the deities as is characteristic of a later age.

¹ See Mayanāmatī songs and Dakshina Babu's collection of folk-lore among other works.

² See Sen's Folk Literature of Bengal, p. 72.

See D. Majumdar's Thākurdādār Jhulī, Madhumālā, p. 21 :

"পুরীর সাত-ছত্রিশ-তের কুঠরী পরে মধুমালার ঘর। সেই ঘরে তিন সারি বিয়ের বাতি, তের থাক পালকে মধুমাল। নিঝুমে ঘুম যায়।"

Also *ibid*, p. 22 :

"প্রথমে জাগিলেন,—মধুমাল। দেখেন,—কেনরে! রাত পোহাইয়া গিয়াছে—পিঞ্জরে শারী বোলে না, বাই দাসীর পায়ের মল বাজে না, তিন সারি বিয়ের বাতি এখনো জ্বলে।"

Thus in Dakshina Babu's collection of folk stories¹ we find such names as Kāñcanmālā (a string of gold), Manimālā (a string of pearls), Śaṅkhamālā (a string of sea-shells), etc., possessed by ladies of high rank. In Dakshina Babu's story of the Princess Kalāvati we have names of six princes as follows :—Hirārāj (Diamond-prince), Mānikrāj (Gem-prince), Matirāj (Emerald-prince), Śaṅkharāj (shell-prince) and Kāñchanrāj (Gold-prince). The love of gold perhaps pervaded the society so much that all sections of the people had a liking to be called in the names of the precious metals. Thus in the story of Madhumālā two of the architects were called Hirāmānik (Diamond) and Sonālāl (Gold). The Captain of a ship in the story of Kāñcanmālā was named Dulāldhan (dearly prized wealth).

The following illustrations will show the poverty of a section of the people even when another section was enjoying enough plenty. This was sometimes due to occasional anarchy that prevailed. Thus in reading of the prosperity of the people in the Mayanāmatī songs we read in the same breath the following :—

² “An East Bengal man with a sweeping beard came from the south to be the adviser of Raja Manik Chandra. He raised the taxation of the people which was originally a pice and a half

¹ See *Thākurmār Jhulī* and *Thākurdādār Jhulī* of D. Majumdar for these examples :

(a) বড় বড় কারিকর রূপলাল, সোণালাল, হীরামণিক, জয়বিজয়, রাজ্যের আর যত কারিকর গিয়া, সেই পাথরের পাহাড় ভাঙ্গিয়া পাতালে পুরী তৈয়ার করিল।—ঠাকুরদাদার বুলি, মধুমাল।

(b) পাঁচ রাজপুত্রের নাম হইল—হীরা রাজপুত্র, মানিক রাজপুত্র, মোতি রাজপুত্র, শঙ্খ রাজপুত্র, আর কাঞ্চন রাজপুত্র। ঠাকুরমার বুলি, কলাবতী রাজকন্যা, পৃঃ ২০।

(c) ডঙ্কা দিলেন নৌকা নড়ে না। কর্ণধার দুলালধন। সকল মাঝি বলে সওদাগর একি ? ডিঙ্গি কেন নড়ে না ? ঠাকুরদাদার বুলি, কাঞ্চনমালা, পৃঃ ৬৮।

See also Sen's *Folk Literature of Bengal*, pp. 66-73.

² ভাটি হইতে আইল বাঙ্গাল লম্বা লম্বা দাড়ি।

সেই বাঙ্গাল আসিয়া মূলকং কৈল কড়ি ॥

আছিল দেড় বড়ি খাজনা লৈল পোনের গণ্ডা।

লাঙ্গল বেচার জোয়াল বেচার আরো বেচার কাল।

খাজনার তাপতে বেচার দুখের ছাওয়ারাল ॥

রাড়ী কাঙ্গাল দুঃখীর বড় দুঃখ হইল।

খানে খানে তালুক সব ছন হইয়া গেল ॥

—মানিকচন্দ্র রাজার গান।

to so much as double the amount (*i.e.*, three pice). It was felt so exorbitant at the time that the poor people had to sell not only their agricultural implements but also their children who were still mere sucklings. Widows and poor people had to suffer much and the arable lands were turned into jungles in many places."

In Kavikaṅkaṇ Mukundarām's celebrated *Chandikāvya*, there is a graphic description of the miseries of poor people in the *Vāramāsi* of Phullarā, the fowler woman. At another place of the same work we find the sorrows of a girl who had to keep goats. The younger wife of a rich merchant had through some family intrigues been obliged to tend the goats in pasture. The following is the description of the miseries of Khullanā, the younger wife ¹ :—

"She entered the house in the evening with the goats in her charge. They were shewn their sheds. And Khullanā stood at the gate with her hands on her heart. She was not permitted to enter the house, but her poor meal was served on a leaf of *kachu* (a kind of esculent root) outside. She received soup in holes made in earth. The dish was as poor as possible. She had rice-dust and the curries stale without any salt in them. She was given *kānji* (a kind of soup) of sour taste which was quite unpalatable. So she remained practically half-fed. She was given a straw-bed to lie upon."

Again, "Khullanā started with the goats in the morning. The wicked co-wife tied some rice in the corner of Khullanā's cloth for her mid-day meal. Khullanā took a rod in her hand and a leaf on her head for protection against the burning sun. The maid-servant of her co-wife Lahanā, named Durbalā, kept a vigilant look on her on the pretext of going to the tank. Khullanā trudged on her way rather slowly."

¹ "অজ্ঞা লয়া আইল রাজ্য দিন অবশেষে ।

অজ্ঞা-শালে অজ্ঞাপণে করাল্য প্রবেশ ॥

হুয়ারে দাওয়ার রান্য বৃকে দিয়া হাত ।

লহনার আদেশে আনিল কচুপাত ॥

ভুঞ্জয়ে খুলনা নারী গর্ভে পাড়ি পাত ।

পরসিত্তে লহনা করয়ে যাতায়াত ॥

পুরাণ খুদের জাউ তাহে আছে কোণ ।

সকল ব্যঞ্জন বাঁকী নাহি দেয় লোণ ॥

* * * * *

হৃদয়ে কপট বড় পাপমতি বাঁকী ।

অবশেষে সরায় পুরিয়া দিল কাঁজি ॥

While the legend describes the hardships to which a poor oppressed girl was reduced, it gives us a picture of poverty and the environments of the life of the lower order of society. It will be evident from the above that the general condition of the people in the pre-Mahomedan period, and to some extent in the Mahomedan period, though good on the whole, was not ideal as described by our poets who revelled in exaggeration.

The people of Bengal excelled in the art of weaving in the past. From our early literature we learn of cloths, chiefly sālīs, bearing artistic names and exquisite embroidery work.

The sālīs which were made of silk were variously named such as, Kāla-Pāt-sālī, Āgun-Pāt-sālī and Kāñchā-Pāt-sālī. In short these were all known as Pātsālīs.

(a) Kāla-Pāt-sālī ¹ (*lit.* silk sālī of black hue):

It was the silk sālī of black colour and was a favourite of ladies of fashion and beauty. It was perhaps specially liked by ladies having remarkably fair colour.

কিছু খায় কিছু কেলে খুলনা হুন্দরী।

ভূণের শব্দায় তার গেল বিভাবরী ॥”

—কবিকঙ্কণ চণ্ডী, পৃ: ১৪২।

পুনরায়—

“প্রভাতে ছাগল লয়া চলিল খুলনা।

আঁচলে বাঁধিল দুয়া চালু অর্ধ-কোণা ॥

ছাটহাতে পাতমাথে ধীরে ধীরে যায়।

জল আনিবার ছলে দুর্বলা গোড়ায় ॥”

—কবিকঙ্কণ চণ্ডী, পৃ: ১৪২।

¹ কাল নাম লৈতে না দেয় দারুণ খাণ্ডী।

কাল হার কাড়ি গয় কালা পাটের সাড়ী ॥

—পদাবলী, বলরাম দাস।

(The cruel mother-in-law of Rādhā did not allow her daughter-in-law to name the word “Kāla” or black owing to its association with the name of Kṛṣṇa whom she disliked. She was also heartless enough to snatch away Rādhā's azure necklace and Kāla-Pātsālī for the very same reason.)

(b) Āgun-Pāt-sāḍī ¹ (*lit.* the silk sādī having flame colour):

It was once very famous and very extensively used. The flame coloured cloths mentioned in the Arthurian legends were evidently exported from Bengal. The flame-coloured silk sādī has been described by Bengali poets of all ages.

(c) Kāncā-Pāt-sāḍī ² (*lit.* uncoloured silk sādī):

This variety of silk sādī was not very fine in texture. The widows were once allowed to use it as we read in the Manasā-maṅgal poems of Bijay Gupta (15th century).

(d) Pāṭer-Bhuni ³ (*lit.* silk Bhuni):

A particular kind of decorated Pāt-sāḍī was known as Pāṭer-Bhuni. It was worn by high class ladies.

The sādīs or cloths which were made of silk were only used by the rich while there was another kind of cloth named Khuān, used generally by the poorer section of the community. It was variously known as Khauma, Khemi, Khani or Khaiyā ⁴ (from Sanskrit Kshauma—a linen). This kind of cloth being linen seemed to be made of fibre. Though common Khuān cloth was worn by the proletariat,

¹ (a) বেথার পরিধান হবে আগুন পাটের সাড়ী।

—মানিকচন্দ্র রাজার গান।

(The harlot would wear the Āgun-Pāt-sāḍī.)

(b) বাপেতে কিনিয়া দিত অগ্নিপাটের সাড়ী।

সেই অঙ্গে পইরা থাকি জোঁলার পাছুড়ী ॥

—কাজলরেখা, ময়মনসিংহ গীতিকা, প্রথম খণ্ড, পৃঃ ৩১৮।

(My father would buy for me Āgun-Pāt-sāḍī. O ill luck, I do use now the worthless cotton Pāchhuris made by common weavers.)

See also Kamalā, p. 117, and Dewan Bhābnā, p. 169, Mymensingh Ballads, (Bengali Version).

² খনি বদলে দিব কাঁচা পাটের সাড়ী।

—বিজয় গুপ্তের মনসামঙ্গল।

(When Behulā of the Manasā-maṅgal poems became widow one of her brothers tried to console her by saying, "We shall allow you to wear Kāncā-Pāt-sāḍī in place of Khani or linen.)

³ পরিত্যক্ত দিলেন সীতাকে বিচিত্র পাটের ভূনি।

—কৃষ্ণবাসী রামায়ণ, লঙ্কাকাণ্ড।

(Sitā was given to wear a decorated silk sādī named Bhuni.)

* "কোমরিতিপট্টবস্ত্রে"—অমর and "কোম অট্টে তুকুলে"—মেদিনী। ক্ষ্মা has two meanings in connection with thread: one is silk and another is শ্মশ (hemp). Perhaps খ্মা referred to the fabrics made of শ্মশ as found in old Bengali literature.

yet there was a superior kind which was known as Nalad Khemi. Khanis were usually very strongly woven.

A kind of cloth usually made of silk was called "Neta" and was strongly woven. We hear of strong cloths (Pāchhuris) made of Neta was in use in the days of Krittivās (14th century) as we read in his autobiography. The Pāchhuris of Neta¹ were not only worn but also served as sheets over carpets even in the royal courts. The words "Nyātā" and "Tyānā," meaning a

(a) থৈয়া বাস পরিধানে থাকি নিশাকালে।

রজনীর শীত মোর খণ্ডে রবিজালে॥

—মাধবাচার্যের চণ্ডীকাব্য।

(Phullarā, the fowler woman, in speaking of her sorrow said, "I spend winter-nights by wearing only a piece of Khaiyā and so I have to warm myself only in daytime.)

(b) খুঞা পরাইয়া পাটশাড়ী কৈল দূর।

—কবিকঙ্কণের চণ্ডীকাব্য, বঙ্গবাসী, পৃঃ ১৪০।

(The lady was compelled to change Pāt-sādī for Khuñā.)

(c) খুঞে তাঁতি হৈয়া দেহ ভস্মরেতে হাত।

—ভারতচন্দ্রের অনঙ্গদামল।

(Being wearer of ordinary Khuñā cloth, you dare to handle the 'tasar' or the silk cloth.)

(d) That the Khuñās were very strongly made may be surmised from the following :—

মোর দেশে এক জাতি, জন কত আছে তাঁতি, বুনিতে অনেকদিন লাগে।

কেবল ধীরের কাম, বস্ত্র বড় অস্থপায়, প্রাণশক্তি টানিলে না ভাঙ্গে॥

—বিজয় গুপ্তের মনসামঙ্গল।

(The merchant Chānd in praising the durability of the Khuñā cloth said, "The weavers in my country produced Khuñā cloths which require many days of slow and patient labour. These cloths are extremely difficult to be torn off.")

(e) বিচিত্র নলদ খেমি দিয়াছিল তার।

—কৈতকাবাসের মনসামঙ্গল।

(The lady was given Khemi sādī of variegated colour.)

¹ (a) আঙ্গিনার পড়িরাছে রাঙ্গা মাজুরি।

তার উপর পড়িরাছে নেতের পাছড়ি॥

—কৃষ্ণিবাসের আঙ্গবিবরণ।

(On the court-yard of the Lord of Gauḍ was spread the red carpet which was again covered over with a Pāchhuri of Neta.)

(b) কেহ নেত, কেহ বেত, কেহ পাট সাড়ী।

—কবিকঙ্কণ, বঙ্গবাসী, পৃঃ ১২৫।

(Some put on Neta sādī (ordinary silk), some white (cotton?) sādī and some Pāt-sādī (high class silk sādī).)

piece of rag, may have some connection with the word "Neta." The expression "Neta" in the sense of silk cloth is still current in Orissa where flags usually made of silk and used on temples are known as "Neta."

Besides the above the following cloths may be noted :—

(i) Chaṭak dhuti and Maṭak dhuti ¹ :

These were cloths worn by men only. Chaṭak dhutis were perhaps coloured or bright as the term "Chaṭak" would signify. Maṭak dhutis might be Maṭkās, a kind of silk cloth of Assam.

(ii) Tasar ² :

It was also much in use in the past as it is in use even now. The Maṭkā and Tasar are common varieties of silk cloth and are very familiar even to-day as serving various purposes.

(iii) Pāṭer-Pāchhḍā ³ :

Pāchhḍās were usually cloths of coarse texture and rather strongly made. Pāṭer-Pāchhḍā or Pāchhuḍi, i.e., coarse cloth made of common

¹ চটক ধুতি মটক ধুতি পরিধান করিয়া ।

—মানিকচন্দ্র রাজার গান ।

(The astrologer wore Chaṭak dhuti and Maṭak dhuti.)

দো ছুটি করিয়া পরে ভদ্রের সাড়ী ।

—কবিকঙ্কণের চণ্ডীকাব্য, বঙ্গবাসী, পৃ: ১৫৩ ।

(The lady wore the Tasar sāḍī in a particular fashion.)

² শীত নিবারণ দিব তদর বসনে ।

—তুঙ্গীলার বারমাসী, কবিকঙ্কণ চণ্ডীকাব্য ।

(We shall ward off the cold with the help of Tasar cloth.)

N.B.—See silk in India by Geoghegan. See also among others "A Monograph on the Silk Fabrics in Bengal" by Nriitya Gopal Mukhopadhyay. See also the "Report on an Enquiry into the State of the Tasar Silk Industry in Bengal and the Central Provinces of India" by the same author.

³ (a) পাটের পাছড়া পৃষ্ঠে ঘন উড়ে যায় ।

খড়ার আঁচল লুটি পায়ে পড়ি যায় ॥

—শ্রীকৃষ্ণবিজয়, মালাধর বহু ।

(The Pāṭer-Pāchhḍā—i.e., silk chādar was seen fluttering over the back while the corner of the cloth was sweeping the ground.)

(b) বেদার খাঁ শিরে ঢালে চন্দনের হড়া ।

রাজা গোঁড়েশ্বর দিল পাটের পাছড়া ॥

—কৃত্তিবাসের আশ্চরিত ।

(The courtier Kedar Khan besprinkled sandal-liquid on the head of the poet Krittivās while the Lord of Gauḍ presented the poet with a piece of Pāṭer-Pāchhḍā, i.e., silk chādar.)

silk ¹ had two varieties—one kind was used as uḍani, oḍnā or chādar and another kind as usual wear, *i.e.*, loin-cloth.

(iv) Gaṅgājalī sādī ² (*lit.* the Ganges water) :

This sādī bore the name of the Ganges water for its fine texture and white colour. In this respect it might be compared with the “Abruā” muslins of the Mahomedan period.

(v) Megh-dambur-sādī ³ (*lit.* thick patch of cloud) :

This kind of sādī was black as signified by the name. It had some resemblance with the Nilāmbarī of our own day.

(vi) Mayūr-Pekham sādī ⁴ (*lit.* the outspread tail of the peacock) :

The name suggests that it was variegated in colour like the outspread fan of the peacock. We often find reference of this sādī in our folk-literature.

(c) যিনে বান্দি নাহি পিঙ্কে পাটের পাছড়া।

—মাণিকচন্দ্র রাজার গান।

(Even the maid-servants would dislike to wear Pāṭer-Pāchhḍā, *i.e.*, coarse silk sādī—so opulent were they.)

(d) বান্দিয়া বাঁশের আগে পাটের পাছড়া।

—কবিকঙ্কণের চণ্ডীকাব্য, বঙ্গবাসী, পৃ: ১৮৩।

(Having tied a Pāṭer-Pāchhḍā, *i.e.*, a piece of silk cloth on a bamboo-staff.)

¹ Some consider Pāṭer-Pāchhḍā as cloth made of jute fibres. They take “Paṭ” in the sense of jute. But the expression “Pāṭ-Kāpaḍ” is always understood to mean silk cloth.

² কীর্ণ কটদেশ বেড়ি পরে গঙ্গাজলী সাড়ী।

—বংশীদাসের মনসামঙ্গল, পদ্মার রূপবর্ণন।

(The goddess Padmā put around her thin waist the sādī named Gaṅgājalī.)

See also the same author—

অপর্য বোজনগন্ধা —“গঙ্গাজলী সাড়ীতে শরীর আচ্ছাদিয়া।”

(The heavenly Apsarā Yojanagandhā covered her person with the Gaṅgājalī sādī.)

³ সাধুর স্ত্রী বাছিয়া পড়িল মেঘডম্বুর কাপড়।

—কবিকঙ্কণের চণ্ডীকাব্য।

(The wife of the merchant made a selection of the Megha-dambur sādī for her wear.)

⁴ ঠাকুরমার বুলি—(দক্ষিণা মজুমদার) শীতবসন্ত, পৃ: ৯৩।

(vii) Āsmān-Tārā ¹ (*lit.* the star of the firmament) :

It was a kind of sādī having fine texture and brilliant embroidery. This sādī seemed to be blue in colour resembling that of the sky, as the description would signify.

(viii) Nīlāmbarī ² (*lit.* the blue sky) :

It was a kind of blue sādī resembling the colour of the sky. This sādī is much in use even now.

(ix) Hīrāman sādī ³ (*lit.* the bird Hīrāman—a species of parrot) :

It was made very fine in texture and bore the yellowish and variegated colour of the bird Hīrāman.

(x) The following names of sādīs are found in Jagatjiban Ghosāl's Manasā-maṅgal poems and they are described as bearing very good quality and possessing interesting names like other sādīs already referred to :—

- (a) Yātrā-sid—Auspicious journey.
- (b) Kāpaḍer Rājā—The king of cloths.
- (c) Mañjā-phul—As soft and white as the flowers of the kuṣa grass.
- (d) Agni-phul—The spark of fire.

The description below will show the qualities which each of these sādīs possessed. It will show the perfection which the weaving

¹ তারপর পরাইল সাড়ী নামে আসমান তার।

ভূমিতে থইলে যেমন ভূরে আসমান পরা।

হস্তেতে লইলে সাড়ী বলমল করে।

শূভেতে থইলে সাড়ী শূণ্ণে উড়া করে।

—ময়মনসিংহ গীতিকার, দ্বিতীয় খণ্ড, কবিতা, পৃঃ ১৬০।

(Then she was made to wear a kind of sādī named Āsmāntārā. When it was kept on the ground it resembled the sky in appearance. When the sādī was taken in hand it dazzled the eyes. If placed on high it seemed to become invisible.

² মামায়ত দিয়াছে কিঞ্চিৎ পাহা নীলাম্বরী।

জল ভরিতে বার সুনাইগো কাঁধেতে গাগরী।

—দেওয়ান ভাবনা, ময়মনসিংহ গীতিকার, দ্বিতীয় খণ্ড, পৃঃ ১৬৫।

(The maternal uncle bought for the girl Sunāi the three-bordered Nīlāmbarī sādī. With this fine sādī on, Sunāi went out to fetch water with the pitcher on her waist.)

³ পড়িয়া রহিল তোমার হীরামণ সাড়ী।

পড়িয়া রহিল তোমার জলের গাগরী।

—কঙ্ক ও লীলা, ময়মনসিংহ গীতিকার, প্রথম খণ্ড, পৃঃ ২২৬।

(There lies your Hīrāman sādī. There lies your pitcher for drawing water.)

industry attained in bygone days and may be taken as a specimen of skill which the weavers exhibited in spinning the thread and making the fabric.

¹To dance in heaven Behulā began to try some sādīs which would suit her best. “First she tried the sādī ‘Jatrā-sid’ (auspicious journey) by name. In it there was embroidery work representing people dancing and singing as in a play. She did not like the sādī and so wore another named ‘the sovereign of sādīs.’ For some reason or other she did not like it and she changed it for another

¹ স্বর্গপুরে বেহুলার বেশবিজ্ঞান ।

কাপড়ের পেটারি বালি আনে টান দিয়া ।
 খান কত বস্ত্র তোলে নিচিয়া বাছিয়া ॥
 প্রথমে পরেন সাড়ী নামে যাত্রাসিদ ।
 নাটুরায় নাট করে গায়ানে গায় গীত ॥
 সে কাপড় পরিয়া বালি আগে পাছে চায় ।
 মনোরম্য নহে কাপড় পেটারি পুরায় ॥
 তার পাছে পরে কাপড় কাপড়ের রাজা ।
 সরস্বা কাকালি রামা মুঠে ধরে মাজা ॥
 সে কাপড় পরে বালি আগে পাছে চায় ।
 মনোরম্য নহে কাপড় খসিয়া ফেলায় ॥
 তার পাছে পরে কাপড় নামে খুঞ নেত ।
 সরস্বা কাকালি মাজা ভরে বাক্কে ছাটি বেত ॥
 সে কাপড় পরিয়া বালি আগে পাছে চায় ।
 মনোরম্য নহে কাপড় পেটারি পুরায় ॥
 তার পাছে পরে কাপড় নাকর মঞ্জাফুল ।
 যাহার স্ততার তোলা পঞ্চাশ টাকা মূল ॥
 দশীর দিগে লেখা আছে দশ গিরিআবন ।
 কুপের দিগে লেখা আছে কালার বুলাবন ॥
 কানাইর বুলাবনে বালকে বাঁশী বাএ ।
 সে সকল গোপাল কৃষ্ণের তাবুল যোগায় ॥
 সে কাপড় পরিয়া বালি আগে পাছে চায় ।
 মনোরম্য নহে কাপড় পেটারি পুরায় ॥
 তাহার পাছে পরে সাড়ী নামে অগ্নিফুল ।
 কাপড়া হুন্দরী দুহে হইল সমতুল ॥
 সে কাপড় পরিয়া বালি আগে পাছে চায় ।
 মনোরম্য হইল কাপড় নাতিয়া বেড়ায় ॥

—জগজীবন বোবালের মননামঙ্গল ।

Again in the Rāmāyana by Krittivās (Lankākāṇḍa) we find

“নীল বসন পরিধান তাহে রাজা পাড়ি ।
 কত কত লেখা আছে পক্ষ পাঁকড়ি ॥”

(The blue sādī had red borders containing the representation of various birds.)

named 'khuñā-neta.' She tied the cloth around her slender waist with the help of a piece of thin cane. It was also not up to her taste and she changed it for the sālī named Mañjā-phul (the Mañjā-flower). This sālī was a very costly one as each 'tola' of thread with which it was woven cost no less than fifty rupees. This sālī had exquisite embroidery work. Its border contained decorations representing hills and forests and the margin breadthwise contained the picture of Vṛndāban in which the cowboys were playing on flutes. Some of them were shown to be supplying Kṛṣṇa with betels. Behulā minutely observed the sālī after wearing it and rejected it also. Then she wore the sālī named 'Agni-phul.' It suited the beauty of Behulā well and she put it on. After minutely observing it she began dancing in joy."

This is not the only instance where we find our ladies making a choice out of many fine sālīs, bearing artistic names, they had in their toilet room. Such passages are to be found in the ' (Mayanāmatīr Gān,' in the East Bengal Ballads and many other poems. It undoubtedly proves that Bengali weavers produced exquisitely wrought cloths of variegated colour and texture—and the mention of these are in perfect accord with the traditional reputation of the country for fine weaving. ¹

The muslin ² of Dacca once attained great fame both in the East and the West. The ancient Romans had great liking for it. It was of so fine a texture that the Roman Senators considered the cloth as not suitable for ladies. Objection was taken as it exposed

¹ Dr. Forbes Watson says :—

(a) " With all our machinery and wondrous appliances, we have hitherto been unable to produce a fabric which for fineness or utility can equal the 'woven-air' of Dacca."

The Poverty Problem in India by P. C. Ray, p. 103.

(b) " For over eighteen centuries, European kings, queens and princes, not to speak of Asiatic monarchs, have taken a delight in possessing some of the best specimens of Indian silk manufactures, either pure or worked with gold and silver, such as Chandtara (moon and stars), Mazehar (ripples of silver), Dup-chan (sunshine and shade), Bulbul chasm (nightingale's eyes), Murgala (peacock's neck), and Shikargah (the hunting grounds)."

The Poverty Problem in India by P. C. Ray, pp. 88-89.

² For an elaborate description about the production of muslin with all its details, see Taylor's " Topography of Dacca."

the body. Hence the use of muslin was stopped by law in ancient Rome—but the ladies were so fond of it, that they often transgressed the law and wore it in spite of the penal punishment which its use involved. The texture was so fine that in the morning if it was spread on the grass, it would perfectly mix with it and if thrown into water it would be quite indistinguishable. These were cotton cloths of extreme fineness but sometimes mixed with silk. The Moghul Emperors, specially Jehangir and his Empress Nurjahan, had always been great patrons of this kind of cloth. The production of muslin shows that the art of weaving retained its perfection of the Hindu days even as late as the later Mahomedan period.

There were various kinds of muslin,¹ a few of which may be noticed below :—

Sangati, Sarbati, Jhunā, Abruā (Abruā would not be distinguished from water if thrown into it), Sarkarali, Malmalkhās, Sabnam (this kind of muslin if spread on dewy ground would perfectly mix with grass and so would remain quite indistinguishable), Rang, Badankhāsā, Albata, Tanjeb, Tarandām. Nayansukh (pleasant to the eye), Sarkand, etc.

The embroidered muslin was known as kāsīdā. It was made of silk and cotton threads. The Pāgris made from kāsīdā were once much favoured in Persia and Turkey. The plain kāsīdā without silk was known as Chikan.

The muslin which contained very excellent embroidery and workmanship was known as Jāmdāni. These were of different kinds such as Kāretā, Toḍādār, Buidār, Terchhā, Jalbār, Pānuā-Hājīā, Chhāoāl, Dubali-jāl, Mel, etc.

Besides the above, there were striped muslins of various kinds for different uses, such as, Nandansahi, Ānārdānā, Kabutarkhop (Pigeon-hole), sākutā, Pāchhadār, Kundidār, etc.

¹ See "A Descriptive and Historical Account of the Cotton Manufacture of Dacca in Bengal" by a former resident of Dacca.

See also Tavernier's accounts of the muslin. A piece of muslin having ten yards in length and one yard in breadth could be passed through the small hole of a ring. Its weight would be less than four tolas.

See also N. N. Banerjee's "Cotton and Woollen Fabrics of Bengal."

It is needless to say that the names of different kinds of muslins had meanings describing the qualities or history of each of them.

Besides the cloths the Kāñchulis too contained artistic decorations and embroidery work. In the *Chañḍi-Kāvya*¹ by Kavikañkaṇ we read what a nicely-made Kāñchuli was. In the *Dharma-maṅgal* poems by Rupaṛām is found a similar description of such a Kāñchuli.² That the Kāñchulis were made costly is evident from such expression as "Lakṣer Kāñchuli."³

Although the society was marked by simplicity in the pre-Mahomedan period, articles of luxury were not altogether unknown among the richer section of the community. Various articles of luxury are referred to in our Old Bengali literature, of which only a few are noticed below.

(i) *Fans*.—Fans were not only articles of common use but also articles of luxury with the rich in the days of Hindu rule. We learn of three kinds of artistic and costly fans in the Old Bengali literature. These were *Daṇḍa-Pākhā*, *Āber-Pāñkhā*, and *Lakṣer-Biyani*.⁴

(a) *Daṇḍa-Pākhā*.—Mention is found of this fan as being used by people of fashion and fancy. It was perhaps an artistic fan made from palm-leaves.

(b) ⁵*Āber-Pāñkhā* :

This fan was made of mica as its name signifies. It contained very nice decorations and was very artistically made.

¹ For embroidery work on Kāñculi's see pp. 61, 62 and 63 (Goddess Durgā's Kāñculi) as described in the *Chañḍi-kāvya* by Kavikañkaṇ Mukundarām (Bangabasi Edition).

² See also Rupaṛām's *Dharma-maṅgal* poems (Nayani's corset).

³ See *Manasā-maṅgal* poems by Jagatjiban Ghosal.

⁴ গ্রীষ্মকালে বদনত দিম্ব দণ্ডপাখার বাও ।

—মানিকচন্দ্র রাজার গাথ ।

(When Rājā Govinda Chandra's wives were tempting him to stay at home and not to go out as a saṇnyāsīn, they said among others—

"We shall fan your face in summer with 'Daṇḍa-pākhā' if you remain at home.)

⁵ শুইতে দিছে শীতলপাটী উত্তম বিছান ।

বাতাস করিতে দিছে আঁবের পাখাখান ॥

—মল্লারী, ময়মনসিং গীতিকার, ১ম খণ্ড, পৃঃ ৫৭

(On the excellent bed the mat known as *Sital-paṭi* was spread and the fan of mica known as *Āber-pāñkhā* was kept on it for use.)

(e) Lakṣer-Biyani : ¹

This Biyani or fan was so costly that it was commonly termed in hyperbolic language as “Lakṣer” or worth a lakh of rupees. A hyperbolic description of this type of fan is found in the Manasā-maṅgal poems of Ketakadās Kshemānanda. This description at least proves with what admiration the people looked towards it. The poet attributed a fan of this kind to be the outcome of skill and workmanship of the architect-god Visva-karmā himself. Thus,

“The workman (the God Visva-karmā himself) took directions from Behulā and very willingly made a precious fan (*lit.* worth a

- ¹ বেহুলা আদেশে কামিল্য হরিষে
লক্ষের বিয়নি গড়ে ।
অতি হুগঠন কৈল আরোজন
চাঁদ চুয়াইয়া পড়ে ॥
- কামিল্য বন্ধানী গঠিছে বিয়নি
শুধু স্বর্ণের ডাটী ।
বিয়নি দেখিয়া স্থির নহে হিয়া
পবন মানিল ভাটী ॥
- কি যে অপরাপ সোণার বিবুক
শোভিছে বিয়নি বুকে ।
তাহে ঝলমল সোণার কমল
শোভে তার চারি দিকে ॥
- ভাঙ্গি পূর্ণ ইন্দু রচে বিন্দু বিন্দু
কমক কুহুম ফুলে ।
ভানু হেন দেখি করে ঝিকি মিকি
কিবা দিব সমতুলে ॥
- সোণার গুণাতে তার চারি ভিতে
বিনোদ বন্ধানে বান্ধে ।
রাখি পৃথিবীতে বিয়নি দেখিতে
চাঁদ ভূমে যেন কাঁদে ॥
- চিত্র মনোহর দেখিতে সুন্দর
লক্ষের বিয়নি খানি ।
আর লিখে তায় বিশেষ উপায়,
পূর্ব পরিচয় বাণী ॥
- চাঁদ সদাগর সোণকা বাণ্যানী
লিখেন তাহার বাড়ী ।
ছয় পুত্র তার চিত্র কৈল আর
যরে ছয় বধু বাড়ী ॥

lakh of rupees ¹). It was nicely made of round shape resembling the moon. Its handle was made of gold. Even the wind-god was afraid of it and bowed to its will at its very sight. There were ornamentation of gold on the fan and the golden lotuses adorned it all around. Its lustre resembled that of the sun. The thread that was used in the fan was golden. When kept on the ground the fan seemed to put the moon weeping (for its inferior beauty). The fan was a valuable one and was full of pictorial decorations. It served as Lakṣmindra and Behulā's introduction to their family by painting their early lives. It showed the six sons of the merchant Chānd with their wives. Their very neighbours of the town were also painted on it. There was to be found on the fan the picture of the steel-house built on the Sonthal hill in which dwelt the pair (Behulā and Lakṣmindra) on the fateful night. There was painted the mournful sight of Behulā moving on the frail barge with her dead husband. The workman gave so much details of Chānd's household that he did not miss with him his servant Neṇā and his maid-servant Jhāuyā.

নগর নিবাসী এ পাট পরশী
 লিখি প্রতি জনে জনে ।
 সাতালি পৰ্বতে লোহার বাসরে
 বেহলা লখাইর সনে ॥
 লিখে এই সব শোক কলরব
 বেহলা ভাসিয়া যায় ।
 লক্ষের বিয়নি কামিল্যা আপনি
 এত চিত্র কৈলা তায় ॥
 চাঁদ সদাগর নেড়া নকর
 আর লিখে ঝাউয়া চেড়ী ।
 কামিল্যা উল্লাস করিতে বাতাস
 গঠিল সোণার ডাঁড়ী ॥
 কামিল্যা তখাই বলিছে লখাই
 গুন তোরা এক ভাবে ।
 লক্ষের বিয়নি গড়্যা দিল আনি
 ইহাতে সকলি পাবে ॥

—কেতকাদাসের মনসামঙ্গল ।

¹ The word lakh in those days did not specify any exact numerical figure that it literally denotes. We find it so often used in this sense that we can safely take it to mean, large, valuable, etc. The crowd consisting "of a lakh of people" (Chaitanya Bhagvata, Adikhanda) should not be taken too literally. It simply means very large. So a lakh of rupees means the great value of the article but not literally lakh.

The workman with great joy then made the golden handle of the fan and finally presented it to Lakṣmindra."

(ii) The *combs*¹ of various descriptions were made of mica. Many artistic things were made of mica such as combs, fans, baskets, etc. Besides these there were ivory dice and "Gaja-mati" (a kind of pearls said to be found in elephant-heads) garlands used as articles of luxury by the rich.

(iii) The *Śaṅkhas* (or the conch-shell bangles).—The conch-shells have always been used in the form of bangles by ladies of Hindu society, as a sign of leading conjugal lives with their husbands alive. Three types of these shell-bangles seemed to be much in favour with them in the past. One type was known as the *Lakṣmībilās Śaṅkha*,² another was known as Muṭh Śaṅkha,³ while the other type was known as the *Kulupiyā Śaṅkha*.⁴ The conch-shells used for this and various other purposes seemed to be sea-shells imported to this province chiefly from the Madras coast, Ceylon and the Malayas, as these are done even now. The conch-shells that are brought into this country are of various kinds and various

- ১ আবের কঁকই লইল রাজা আবের চিকণি ।
আবেতে রাঙ্গিয়া লইল খাড়ি আর বিউনি ।
হাতীর দাঁতের পাটি লইল গজমতি মালা ।
ভেট দিতে নবাবের করিল যে মেলা ॥

—রূপবতী, ময়মনসিংহ গীতিকা, পৃঃ ২২৮।

(The *rājā* took with him the combs made of mica and the baskets and fans coated with mica. He also took with him ivory dice and Gajamati garlands. All these the *Rājā* took with him as presents for the Nawab.)

- ২ লক্ষ্মীবিলাস শঙ্খ সাড়ী বস্ত্র ভাল ।

—বংশীদাসের মনসানঙ্গল (D. Chakravorti's ed.).

(The *Lakṣmībilās Śaṅkhas* and good *Sāḍīs*.) পৃঃ ৪৭৬।

- ৩ লক্ষ টাকার মুঠ শাঁখা মস্তকে ভাজিল ।—মাণিকচন্দ্র রাজার গান।

(The queen dashed against her head and broke her "Muṭh" *Saṅkha* worth a *lākh* of rupees.)

- ৪ পরে দিব্য পাট সাড়ী কণক রচিত চুড়ী
ছই করে কুলুপিয়া শঙ্খ ।

—কবিকঙ্কণের চণ্ডীকাব্য (বঙ্গবাসী) পৃঃ ১৫৯।

(The lady wore fine silk *sāḍī*, golden bracelets, and *Kulupiyā* bangles in two hands.)

qualities. The best of them besides Surāti, Duānāpati and Ālabilā which come from Bombay-side are now imported from Ceylon and are known as the “*Tit-Cowrie*” Śaṅkhas. Next in quality are the “*Pati*” Sankhas which come from Setubandha Rameswar in the south of the Madras Presidency. The “*Jāhāji*” Śaṅkhas or the conch-shells which are imported to Bengal in ships coming from various places are inferior to the above two and may be ranked in the third class. The “*Garbāṅki*” Śaṅkhas which are brought in from the Madras-side are of the worst quality and may be termed as the fourth class Śaṅkhas. Dacca has always been famous for her fine workmanship in preparing shell-bracelets.

(iv) *The chāmars (chowries)*.—The chowries have always been favoured in this country in all ages as articles of luxury. In religious and ceremonial occasions too chowries have been found to be indispensable. Whence Bengal imported this article is not known, but the poets of Manasāmaṅgal have described it as imported from overseas. Whether there is any truth in the description we do not know. But in the present days these are imported into Bengal and other parts of India from the Himalayan regions in large quantities. The Yak tails of these mountainous tracts supply very good chowries. There were three kinds of chowries mentioned in the old Bengali literature, *e.g.*, (1) Dhabal-chāmar, (2) Hāḍiyā-chāmar, and (3) Gangājali-chāmar. The names of (1) and (3) signify that they were white in colour. The name of (2) leads us to think that it was made by the Hāḍī caste.

১ পাট শণ বদলে ধবল চামর পাব।—কবিকঙ্কণচণ্ডী (বঙ্গবাসী), পৃ: ২২৩।

(The merchant Dhanapati said that he would get white chowry in exchange for the jute and the hemp.)

২ কত বা নেতের উড়ে পতাকা হুন্দর ॥

তাহার উপরে বাক্সে চামর গঙ্গাজল।—বিজ কমললোচনের চণ্ডীকাব্য।

(Then were many nice-looking pennons fluttering in the wind over which there was attached a Gangājali chowry.)

৩ চতুর্দিকে লাগাইল হাড়ীয়া চামর।—বিজ কমললোচনের চণ্ডীকাব্য।

(Around a chariot were fixed the Hāḍiyā chowries.)

হাড়ীয়া চামর হাতে (Having Hāḍiyā chowry in hand)—Bangsīdasa's Manasā-maṅgal (the dance of the Apsarās).

(v) *Umbrellas* ¹.—Umbrellas made with cloth usually called Meghdambur was once a fashion in the country. This kind of cloth had a variety which was worn as *sadi* as mentioned previously. The name suggests the black colour of the cloth.

(vi) *Shoes*. ²—Silver and velvet footwear were once in vogue among the aristocracy. It is not known whether these were rarely or extensively used by the rich of this country.

(vii) *Blankets*. ³—Blankets of various kinds were in use. Of these 'Indra-kambal' was perhaps the best and was in use among the

¹ মেঘ ডব্বুর ছত্র ধরিলেক তুলি।

ছুইপাশে খেত চামরের ঢুলাঢুলা।—মনসামঙ্গল (বগীবর)।

(Upon the head of the merchant's son was outspread the Meghdambur umbrella and on his two sides were two men fanning him with two white Obowries.)

² (i) রক্ত পাদুকা চাঁদ দিলেন চরণ।—বংশীদাসের মনসামঙ্গল।

(The merchant Chand put on his feet the silver footwear. We may suggest that this reference to রক্ত পাদুকা does not imply 'shoes' but sandals. The comparatively wealthy people used to put on sandals made of silver and not wooden.)

(ii) খাসা মথমলি পাদুকা পায়।—রামনারায়ণের ধর্মমঙ্গল।

(Good velvet shoes were worn.)

³ (i) শুদ্ধ যে সকল বস্ত্র রক্তকম্বল। (বংশীদাসের মনসামঙ্গল, ডিক্রা বোঝাই করা)।

(Among the good fabrics the red blankets.)

(ii) মাটির উপর পাটী বিছায় এক বুক উছল।

তার উপর কেলাইয়া দিল ইন্দ্রকম্বল।

(In making a bed, a bedsheet was first put upon which was spread a mat. Then upon it was spread an Indra-kambal or blanket.)

(iii) The poor men used *khosālā*. Thus :—

হরিণ বদলে পাই পুরাণা খোসালা।

('For the skin of a deer I get old *khosālā* for my wrapper,' said the fowler-woman Phullarā).

(iv) ভোট কম্বল প্রতি প্রভু চাহে বারেবার।

(Chaitanya repeatedly looked towards the Bhotkambal.)

—(চৈতন্য চরিতামৃত, মধ্যখণ্ড, ২০ পৃঃ)

Bhotkambal and Bhuti might have been the same kind of blanket.

rich and fashionable society. There was also the red blankets (রক্তকম্বল) in use among the rich. Besides this there were two other kinds known as Khosālā and Bhot-kambal meant for the poor.

(viii) *Carpets*.¹—Carpets were also in fashion in the past as these are now even to this day. We know Persian carpets were much valued in this country during the Moslem rule.

(ix) *Canopies (Shāmiānās)*.²—The Shāmiānās, or Chāndoās as they were called, were decorated with many artistic designs. They were perhaps costly articles used on ceremonial occasions.

(x) *Sheep*.³—The fighting sheep were perhaps much valued in old days. These were trained, it seems to us, even in the

বস্তা হনে খসাইল ভুটী ভরা তাণ্ড ।

—(বংশীদাসের মনসামঙ্গল, বেসাতি) ।

(From the sack was taken out the Bhuti.)

¹ ছলিচা গালিচা লহ বিচিত্র বিছানা ।

(Take with us the carpets of different kinds and decorated bedding.)

রাজা কৈল অঙ্গীকার

ভিন্ন সাধু বসিবার

ছলিচা ফেলাইয়া দিল আগে ।

—(বংশীদাসের মনসামঙ্গল, সিংহলরাজের সহিত চাঁদের সাক্ষাৎ) ।

(The king agreed and at his command a Dulichā was spread for the merchant to sit upon.)

² কারুয়া টাঙ্গাইয়া করে ঘর মনোহর ।

—কমলা, ময়মনসিংহগীতিকা, পৃঃ ১৪৯, ২য় খণ্ড ।

(The room was made beautiful to look by spreading a Kāruā or artistically decorated shāmiānā.

পাটের চাঁদোয়া শোভে মাথার উপর ।

—কৃত্তিবাসের আশ্ববিবরণ ।

(Silk-Shāmiānā adorned the roof.)

³ রাজভেট নিল সাধু যুঝারিরা ভেড়া ।

পার্বত্য টাঙ্গন তাজী লৈল দুই ঘোড়া ॥

—কবিকঙ্কণ চণ্ডী, বঙ্গবাসী, পৃঃ ১৩২ ।

(For presentation to the king, the merchant took with him a fighting sheep and two horses of Hilly or Tāngan and Arab or Tāji type.)

pre-Mahomedan days. It was very current in the days of Moghul rule. Even now it obtains in many parts of the land.

(xi) *Horses*. ¹—Horses were imported from foreign countries and formed part of the luxury of the rich. These were given in presentation. Besides, for common use, a good horse was a necessity in the past as a means for easy transportation and warfare.

(xii) *Stones* ²—The rich men of the country imported precious stones of various colours to decorate the garments, ornaments and buildings. Artificial plants, birds and flowers would be made of them as we find described by Dwija Kamala-Lochana in his *Chandikā-vijaya* and by Bhārat Chandra in his celebrated *Annadāmaṅgal*. Bengal might have manufactured glass even in the days of Hindu rule and got stones, specially blue-stones, in their stead from foreign countries. Among all kinds of precious stones the blue-stones seem to be most favoured.

¹ ইরানী টাঙ্গন তাজী

গুরঙ্গ কামোদা বাজী

সিন্ধুদেশী তুরগ বিশাল ।

—মাধবাচার্য্যের চণ্ডীকাব্য ।

(The horses of Iranian, Tāngan or Hilly, Tāji or Arab, Surangā, Kāmodā and Sindh extraction were sent to the battle-field. The Sindh-horses were very big in size.)

In Kavikankan-Chandi we find the merchant Dhanapati in his list of articles for import mentioned also horses.

He says—

কুরঙ্গ বদলে

তুরঙ্গ পাব

নারিকেল বদলে শঙ্খ ।

—কবিকঙ্কণ চণ্ডী (বঙ্গবাসী), পৃ: ২২৩ ।

(I shall get horses in exchange for the deer and the conch-shells in exchange for the cocoanut-fruits.)

² কাচের বদলে নীলা ॥

—কবিকঙ্কণ—চণ্ডীকাব্য (বঙ্গবাসী), পৃ: ২২৩ ।

(Dhanapati, the merchant, expected to import Nilā or emeralds in exchange for the ordinary glass.)

(xiii) *Bed-steads*. ¹—Bed-steads of gold were described by many poets from the oldest to the latest. The description might not be all poetic fancy. The bedding used on them were probably very costly and excellent. Pillows made with mustard seeds were sometimes used as we learn from our folk-literature and they were regarded as a piece of luxury.

(xiv) ² The following kinds of fabrics were once very famous.

(a) খেস (rough cloths, cotton Pāchbrās, still in use in Tipperah-side as bed-sheet and winter-cloth).

(b) খুঞি (Khuā fabrics).

(c) ভূটী (Bhutan blankets or Bhot blankets).

(d) নেত (Silk fabrics).

(e) মকমল (velvets).

(f) রক্তকমল (red-blankets).

(xv) *Mosquito-curtain*. ³—The mosquito-curtains were once made to suit the golden bedsteads. Among the articles of luxury,

¹ নেয়ারের ছানী খাট ধরে নানা রঙ্গ ।

দীবে পাশে মাপি দিবা সোণার পালঙ্ক ॥

—বংশীদাসের মনসামঙ্গল (বেসান্তি) ।

(In place of charpoys covered with tapes of different types you will have to give in exchange golden bed-steads of equal sizes.) Our folk Literature contains profuse descriptions of these golden bed-steads. See *Thākurmār-jhuli* (D. Majumdar), p. 58, Ghumantapuri. See also the story of *Mālanchamālā* (*Thākurdādār Jhuli*). See also Mymensingh Ballads, the story of *Maluā* (p. 78, Bengali version) and *Kājalrekḥā* (p. 322, Bengali version).

² সমার প্রধান ডিঙ্গা নামে টিরাট্টী ।

পূর্বে যাতে ভরিছিল খেস খুঞি ভূটী ॥

নেত কথিবায় ভর সিতি মকমল ।

শুদ্ধ যে সকল বস্ত্র রক্তকমল ॥

—বংশীদাসের মনসামঙ্গল (ডিঙ্গা বোঝাই করা) ।

(The *Tiathunti*—*lit.* the parrot-beaked—was the chief vessel filled previously with Khes, Khui or Khua and Bhuti. It was partly filled with silk fabric and partly with velvet fabric and woolen blankets of red colour.)

³ খাট পালঙ্ক আছে কত চান্দ্রা মশারী ।

—ময়মনসিংহ গীতিকার, ১ম খণ্ড, কাম্বলরেখা, পৃঃ ৩২২ ।

(In the house there was no want of costly bed-steads and chānduā-curtains.)

mosquito-curtains were always mentioned by the poets. In Mymensingh ballads is to be found a kind of these curtains named *chānduā*-curtains. These curtains were sometimes made with silk-cloth.¹

(xvi) *The mats.*²—The mats known as the *sital-pāti* were once very famous as mentioned previously. These were very artistically made and used on the beds of the rich and fashionable. The workman ship still exists to some extent in the country side of Bengal, specially of East Bengal.

(xvii) *Piḍis or seats.*³—Reference of *piḍis* made with gold are often to be met with in our old literature. Those made with suitable wood such as of *Kānthāl* (jack-wood) and *Māndār* (the coral tree, *Erythrina fulgent*) were also articles of luxury.

¹ মশা নিবারিতে দিব পাটের মশারি ।

—কবিকঙ্কণ চণ্ডীকাব্য, হুশীলার বারমানী ।

(‘I shall give you silken mosquito-curtain to ward off the mosquitoes,’ said the princess *Susilā* to her husband.)

² The mats *sital-pāti* sometimes had artistic decorations of flowers, as the following line would signify—

চাপানাগেশ্বর পাটী কাঠের চৌদল ।

নানা চিত্রাবলী তাতে আঁকিছে সকল ॥

—বংশীদাসের মনসামঞ্জল, বেনাপতি ।

(The mat known as *Chāpā-nageswar* (*lit.* two kinds of flowers) and the wooden *palanquin* (*choudal*) contained many pictorial representations.)

শীতল পাটী বিছাইয়া দিমু বালিসে হেলন পাও ।

—মাণিকচন্দ্র রাজার গান ।

(Said the Queen to the Raja—“We shall spread *Sital-pāti* on which you will sit leaning on a pillow.”)

শুইতে দিছে শীতল পাটী উত্তম বিছান ।

—মল্লয়া, ময়মনসিংহ গীতিকা, ১ম খণ্ড, পৃঃ ৫৭ ।

(A good bed with a piece of *Sital-pāti* on it was given for use.) শীতল পাটী (*lit.* means the mat which keeps the body cool):

See also *Rupavati*, *Mym. Ballads*, Part. I, p. 229.

³ (a) বহুবায় করি কড়ি করিলাম খাট পিঁড়ি

—কবিকঙ্কণ-চণ্ডী, বঙ্গবাসী, পৃঃ ১২০ ।

(With much cost I made the bed-steads and *Piḍis* or seats.)

(xviii) *Looking glass.* ¹—Looking glasses were made with much care to suit the fancy of the rich. These were sometimes adorned with gold and so made costly. These were quite possible as the glass was once extensively manufactured in India and in Bengal particularly. The hint of glass trade as given in the list of merchandise of Dhanapati by Kavikankan is sufficiently indicative of this.

(xix) *The Dolā (a kind of palanquin).*—Palanquins were ordinarily taken recourse to by the wealthy for moving from place to place. These were sometimes made in a way befitting the luxurious ways of the rich. The following description will show the outfit of a richly furnished palanquin.

“² The merchant Dhanapati's attendant managed to make the proper equipment of the palanquin to be used by his master. The handles were made with gold and gems duly besprinkled with

(b) উত্তম কাঠালের পিড়ি বসেতে পাতিল ।

—ময়মনসিংহ গীতিকা (কাজলরেখা), ১ম খণ্ড, পৃঃ ৩১৫ ।

(Very good seat made of jack-wood was kept on the floor for use.)

(c) স্থলর পিড়িগুলা মান্দারের সার ।

—মনসামঙ্গল, বেসাতি, বংশীদাস (হারিকা চক্রবর্তী) ।

(These good seats made of choice coral wood.)

¹ বাম করে হেম দণ্ড কর্ণক দর্পনী ।

—কবিকঙ্কণের চণ্ডীকাব্য, বঙ্গবাসী, পৃঃ ১৫৪ ।

(On the left hand there was the golden looking-glass with the golden handle.)

² কিস্করে করিয়া দিল দোয়ার সাজন ।

বিবিধ প্রকারে বাদ্য বাজায় বাজন ॥

বরণের শীজা কুড়া কর্ণক আকুড়া ।

হীরামুখী নামে যার চন্দনের কুড়া ॥

উপরে ছায়নী দিল পাটের পাছোড়া ।

চারিদিকে নাশে গজ মুকুতার ঝারা ॥

ময়ূরের পাখে যার লেগেছে ছিটুনি ।

বেলন পাটের খোপা সর্বদা দাপনী ॥

দোয়ার উপরে সদাগর হেলে গা ।

ডানি বামে পড়ে খেত চামরের বা ॥

—কবিকঙ্কণের চণ্ডীকাব্য, বঙ্গবাসী, পৃঃ ২২৩ ।

For silk-covered palanquins see also Kavikankan Mukundaram's Chandikāvya, Bangabasi ed., p. 125.

liquid sandal. The roof of the palanquin was covered with a piece of thick silk. Precious gems (fabulously said to be found in elephants) decorated its skirts. The peacock-feathers were used to adorn the palanquin. The silk-tufts around it gave it a dazzling look. The merchant sat on the palanquin leaning on one side and both on his right and on his left his attendants were fanning him with chowries."

(xx) The following description of a *chariot*¹ will give us some idea of the luxury enjoyed by the rich in the days of the Hindu rule. Whether the chariots in bygone days were adorned in the way mentioned here or not, the description inspite of occasional poetic exaggerations tallies with the indigenous artistic designs to be found in a rich man's drawing room. The use of golden vases, chowries, and imitation trees and flowers made of gems are some of the items of luxury of old days. In the *Annadāmaṅgal* (18th century) by Bharatchandra such descriptions of artificial flowers and bees made of precious stones are to be found.

"The chariot contained the standard and festoons, made of silk cloth and gold. A white *chowry* was fitted upon the standard. The flagstaff contained gems and corals of all descriptions. The chariot was covered with cotton cloth and the staffs which supported the cover contained valuable stones here and there. The seat of the hero in the chariot was made of silver. Its whiteness resembled the moonlit night of autumn. A vase full of gems and valuables was placed on the chariot. Besides the various poles supporting the roof were made of gold and these were tied down with the help

- ¹ কাঞ্চনের দণ্ড ধ্বজ রথের উপর ।
 কত বা নেতের উড়ে পতাকা হুন্দর ॥
 তাহার উপরে বাকো চামর গজাঞ্জল ।
 রত্ন প্রবাল লাগে করে বল মল ॥
 নেকের ওয়ারি দিল তাহার উপর ।
 স্থানে স্থানে দণ্ডে লাগে অমূল্য পাথর ॥
 রূপার আন্তর্যাস রথে করে বল মল ।
 শরতে প্রকাশ বেন গগন মণ্ডল ॥
 কাঞ্চনের যুদ্ধধরা তাহাতে তুলিল ।
 বহুবিধ ধনে তাহা হুসজ্জ করিল ॥

of silver strings. A black-bordered cotton cloth covered the chowry which adorned the top of the chariot. A vase was put on the roof and crystal columns with variegated stones adorned the inside. Besides the blue, black, yellow and white stones, there were also mirrors and diamonds which bedecked the precious columns. The space which the chariot contained was all dazzling gold. On all sides it contained a particular kind of chowry called *Hāḍiyā-chāmar*. The posts were bedecked with pearl-garlands which illumined the dark inside. The precious gems literally made the cabin of the warrior as dazzling as the sun. The chariot was big enough (*lit.* two miles) to contain reservoirs of water for the thirsty people.

“The water was clear as crystal. The sides of the tank contained trees all made of gold with their fruits made of gems. On the water was kept golden lotuses upon which the aquatic birds, the swans and the bees were represented as rushing in to gather honey. Even the elephants were shown as plunging in the water to eat the lotus-stems and making deep sounds causing a feeling

সোণার সাঁড়কে রুয়া সোণার ছাটনি ।
 রজতের গুণে তাতে তুলিল বাঁধনি ॥
 আন্ধারী পারিয়া নেতে ছাইছে চামরে ।
 কনক কলস দিল চালের উপরে ॥
 ফটকের স্তম্ভ দিল ভবন মাঝার ।
 নানাবর্ণে শিলা দিল মধ্যে মধ্যে তার ॥
 নীল কৃষ্ণ পীত স্তব্ধ পাথর ।
 বলক দর্শন তাহে দেখিতে হুন্দর ॥
 হীরার বুঝুকা ভাধে দেখি হুশোভন ।
 এক স্তম্ভে লাগাইল পঞ্চরাজার ধন ॥
 হুবর্ণ আভ্যাস যেরে করে বলমল ।
 চতুর্দিক লাগাইল হাড়ীয়া চামর ॥
 তাহাতে লম্বিত গজ মুকুতার ঝাড়া ।
 অন্ধকার মধ্যে যেন দীপ্ত করে তারা ॥
 মধ্যে মধ্যে লাগে হীরা মুকুতা খিচনি ।
 যুদ্ধ ঘর আশা যেন দেখি দিনমনি ॥
 রথের উপরে কৈল মায়া সরোবর ।
 তৃষ্ণাতুর হৈতে তাধে খাইতে চাহে জল ॥

of alarm. The charioteer bedecked the chariot with gold and adorned it also with a flower-garden containing representations of sweet-scented flowers of all descriptions."

Exchange and General Conditions of Life.—

During the early Hindu period and up to the beginning of Mahomedan rule the general method of buying and selling was conducted by a system of barter, though there was a medium of exchange in the shape of cowries and copper coins for smaller, and gold and silver coins for bigger transactions. The Bengalis carried their system of barter even to foreign countries which was commonly termed as "Badal-Bāniyya." In the later Hindu period when trade declined, the Hindu merchants became notorious for their dishonesty. The picture of Murari Sil in the Chandikāvya and that of the merchant mentioned in the story of Saṅkhamālā¹ show that the Hindu merchants in the declining days of their

প্রহর-প্রমাণ কৈল মায়া সরোবর ।
 ফটিক আকৃতি দেখি তার মধ্যে জল ॥
 কাঞ্চনের তরু তীরে শোভে মনোহর ।
 তাহাতে শোভিছে সব মাণিকের ফল ॥
 বারি মধ্যে পদ্ম পুষ্প ফুটিছে বিস্তর ।
 উড়ে পরে কেলি করে পক্ষী জলচর ॥
 রাজহংসগণ চরে দেখিতে হৃন্দর ।
 কনক কমল দলে পড়িছে ভ্রমর ॥
 মৃগাল খাইতে তাতে নাখিছে কুঞ্জর ।
 ঘোর নাদ করে তাতে শুনি ভরস্কর ॥
 সারথি করিল রথ কাঞ্চনে নির্মাণ ।
 নানারূপ করে তাতে পুষ্পের উদ্ভান ॥

—দ্বিজ কমললোচনের চণ্ডীকাবিজয় (ধূলোলোচনের যুদ্ধসজ্জা) ।

See Kavikankan Chandikāvya (Bangabasi ed.), pp. 73-74.

¹ See the story of Saṅkhamālā collected by Dakshinaranjan Mitra Majumdar in Thākurdādār Jhuli, p. 221.

কোনও বেনে দারুচিনি দিতে দরমুজ বাহির করে ।

কোনও বেনে কাঁহনের বস্ত্র বেচে দিকার দরে ॥

commercial activities had lost their traditional integrity. Individuals, communities and nations—all lose their honesty on the eve of their downfall.

In the seventeenth century the common currency in Bengal was represented by the cowries, *dāmdīs* and the *dāms*, besides the *sikkās*. Though the ratio between the *dāmdīs* and *dāms* varied at different times still on the whole eight *dāmdīs* were taken to be equal to one *dām*, and forty *dāms* were equal to one *sikka* rupee. *dāms* and *dāmdīs* were copper coins.

It goes without saying that the articles in the market were far cheaper in olden times. In the 15th century the whole marriage ceremony of Chaitanya Dev was performed with a few cowries and this was referred to as a magnificent instance of costly marriage by the poets who described it.¹ A century earlier, Krittivas, the celebrated poet of the Ramayanas, was satisfied with a piece of *Pāter-Pāchrā* (a kind of coarse silk cloth) from the Lord of Gauḍa while a century later Kavikankan spoke highly of “Jagannathi” sheet which, we think, also was not cloth of a very fine quality. In the latter part of the 16th century, the condition of society was equally simple as may be gleaned from Mādhavāchāryya’s *Chandikāvya*.

Though the articles were very cheap and the people, generally speaking, lived simple lives, yet luxury in all profusion characterised the aristocracy. The princes and merchants were lavish in their expenditure over luxury. We find in the *Maynāmati* songs that even boys of ordinary families were accustomed to play with golden balls. In the *Manasāmaṅgal* poems² there are references to grand processions and of very costly articles during the wedding ceremonies of the merchant class as described by the poets in a somewhat

কোনও বেনে পাখরের টুকরা ঝাপিতে ভরিয়া ধোয়।

মহামণিক্য মহামণিক্য বলে লোকেরে বিক্রয়।

(“There are some merchants who produce ‘darmuj,’ a kind of poisonous wood, and falsely name it cinnamon before the customers, while there are some who sell articles worth a kahan for a sikka. Some have their baskets full of pieces of common stones and sell them as valuable gems.”)

¹ See Chaitanya Bhāgavat (Ādikhanda) by Vrindavan Das, fol. 95-96, C. U. MS. No. 472.

² See Pandit Janakinath’s *Manasāmaṅgal*, C. U. MS. No. 1357, Folia 90-93.

hyperbolic strain. This of course refers more to the condition of Bengal during pre-Mahomedan days when the society was more or less under the Buddhistic influences. Perhaps it was due to the Brahminic ideal of renunciation at a later period that the society became gradually more simple.

The following lines from Kavikankan's Chandikāvya may be noted as an illustration of cheapness of articles in bygone days.

"The maid-servant Durvalā went to the market with the carriers and fifty kāhans of cowries..... She bought long gourds (*Cucurbita lagenaria*) and green pumpkin gourds. Pieces of these vegetables she bought at the rate of a hundred. She bought ripe mangoes the price of which she settled at the rate of baskets. She bought posset at the rate of a vis (perhaps twenty gandās, *i.e.*, one anna per seer) and the betel-leaves at the rate of a "pan" (*i.e.*, one anna). She also did not forget to buy the sugar-candy called the navāt. She paid ten pans (*i.e.*, ten annas) for a live rabbit. She bought very big and delicious Rohit fish (*Cyprinus*). * * * She also bought other fishes such as the Chital and the Sheat fish (Boāl). She then bought 64 (*lit.* 16 pans) lobsters. The clever maid-servant bought a castrated goat with eight kāhans of cowries, *i.e.*, eight rupees. Mustard oil she bought at the rate of ten buḍis, *i.e.*, 10 pice per seer," etc., etc."

The articles as may be noticed here were all for consumption in the dinner and represented purchases of a rich family. Mustard oil selling at 10 pice per seer might be contrasted with its modern price which is 12 annas a seer.

Similar pictures of cheapness and simple living even amidst descriptions of luxury are also given in the works of the

দুর্বলার বেদান্তি ।

দুর্বলা হাটেরে যায়, পশ্চাতে কিঙ্কর ধায়,

কাহন পঞ্চাশ লয়া কড়ি ।

* * * * *

লাউ কিনে কচি কুমড়া, শও মূলে পলা কড়া,

পাকা আত্র কিনে বুড়ি-মূলে ।

বিশা দরে ছেনা তিলি কিনিল নবাত চিনি

গণ্যে পণ মূলে পাণ নিলে ।

pre-Mahomedan period or relating to it, such as the earlier Sivāyanas and the Maynāmati songs.

How cheap things were may be evident from the following list which contains articles purchased on account of a marriage ceremony in a rich zemindar family of Mymensingh only 122 years ago.¹

শ্রীশ্রীহর্গ

সন ১২১১

হিসাব জিনিব খরিদ হাট সাহাগঞ্জ।

তারিখ ২৮শে জ্যৈষ্ঠ।

আসাবী	জিনিস	রোটপরা	কোড়ি
হরিদ্রা (Turmeric)	/২	...	১৮/০
সিন্দুর (Vermilion)	১ দফা	...	৮/১০
চুণ (Lime)	/২৥ সের	...	/১০
পান (Betel-leaf)	২০ কুড়ি	...	১৥০
তামাক (Tobacco)	/১	...	/০
ডিঙ্গাকলা (Banana of Dingā class)	১ ছুড়ি	...	৬৮/০
মরিচ (Chilli)	/২ সের	...	১৮/০
মাসকলাই (the pulse or kidney bean : <i>Phaseolus radiatus</i>)	/৫	...	১৮/০
মসলা (Spices)	১ দফা	...	০/১০
দাইল (Split peas or pulse)	/৭৥ সের	...	১৮/১০
লবণ (Salt)	/৭ সের	...	৪৮/০

মূল দিয়া পণ দশ

কিনিল জীবন্ত শশ

অরঠ কমঠ কিনে রই।

*

*

*

*

*

রঙ্গল সঙ্কান জানে

চিন্তল বোয়ালি কিনে

শোল পনা কিনিল চিঙ্গড়ী।

চতুর সাধুর দাসী

অটি কাহনেতে খাসী

তৈল সের ধরে দশ বড়ি।

ইত্যাদি। কঃ কঃ চণ্ডীকাব্য (বঙ্গবাসী), পৃঃ ১৫৫-১৫৬।

¹ See ময়মনসিংহের বিবরণ by Kedar Majumdar.

আসামী	জিনিস	রোপৈয়া	কোড়ি
চিনি (Sugar)	১৭ সের	...	১/১০
আমলি (Tamarind)	১২৥ সের	...	২/১৫
ডাব (young cocoanut)	৫টা	...	৯/১০
কাছলা	২টা	...	৯/০
পাতিল (Earthen pots)	৫টা	...	১৭৥০
" "	২টা	...	১/১০
তেজপাতা (Cassia leaves)	১ দফা	...	১/০
টিকিয়া (small cakes of charcoal-dust)	১ দফা	...	১/০
বাঁশ (Bamboo)	১ দফা	...	১৬০
পাট (Jute)	১১০ সের	...	২/১৫
সলুক লবণ (Rock salt or sea salt)	"	...	১৯/০
ডিম (Eggs)	১ দফা	...	১/০
ছিকর	১ দফা	...	২২৥
লঙ্গ (Cloves)	১ তোলা	...	১০
সাদাকাগজ (White paper)	১৥০ দিআ	...	১০
শুপারি (betel-nut)	১০ সের	...	৫৥৯/০
মৎস্ত (Fish)	১টা	...	২/০
মট্টকের রাংচা (Tin for the tiara or crest)	১ দফা	...	২/০
" "	"	...	১৯/০
নাও কেরিয়া (Boat-hire)	"	...	"
আয়না মাল (Glass)	"	...	১০
কেবলা পাটুনি	"	...	১২/০
হুয়ারিয়া পাটুনি	"	...	৯/০
গুনি ১জোড়	"	...	৬০

২২/০

সাবেক পাওনা ইত্যাদি

১১২/৫

বাদ কৈফিয়ত ফেরত

১৯/০

মোট

২৪১৯/৫

কাপড়	রোপেয়া	কোড়ি
(অস্পষ্ট) ৩খান	...	১৫০
পাট হাতি ১খান (cloth)	...	১০
গামছা (towel) ১খান	...	৫
গজি (cloth) ১খান	...	১১/১০
এক পাট্টা ১খান (cloth)	...	১১/১০
পগোড়ি পটকা ৪গাছ (A narrow slip of cloth for the turban) ¹	...	৫১০
		৪১৫

At this period the whole amount represented only Rs. 12 in our present currency. Some items such as rice, oil and others are omitted in the list. Even including them the whole amount could not exceed Rs. 20.²

It is only the other day, *i.e.*, in 1838 A. D., Mr. Taylor in his Topography of Dacca, furnished two lists of expenditure during the funeral ceremonies of the Hindus and the Mahomedans. It appears from his calculations that the Hindus of indigent circumstances in his day, spent about Rs. 7 for the purpose. The Mahomedans also spent about the same amount. In the Srādh ceremony such Hindus spent about the same amount while the Mahomedans in their fourth fathā spent not more than Rs. 5. According to Mr. Taylor the Hindus and Mahomedans of limited means spent about Rs. 10 each, in their marriage ceremony. This writer calculated that at this time one ordinary meal in a hotel of Dacca would cost only two pice.³ Such was the economic condition of Bengal only 90 years before, not to speak of earlier periods.

This cheapness might be due to the fact that the currency was less in circulation than now. This might also be due to the fact that the people led on the whole simple lives and kept less touch with the foreigners and the whirlpool of the world-trade than we find in

¹ See ময়মনসিংহের বিবরণ by Kedarnath Majumdar.

² The present value of these would be something like Rs. 50.

³ See Taylor's Topography of Dacca.

See also the Dacca Gazetteer, and ঢাকার বিবরণ, pp. 159-167.

existence now. Even when the Bengalis carried on foreign trade in her palmy days, they did it to their own advantage, thus avoiding loss in the bargain. Whatever might have been the cause of cheapness, it is sure the articles of general consumption were plentiful and necessarily very cheap.

The people in general depended mostly on agriculture and thus if the produce was good, people lived contented and happily and if it was bad their miseries were indescribable. The caprices of the rulers sometimes ruined the people altogether. No doubt when the ruler was good everything went on smoothly as the following illustration from Kavikankan's Chandikāvya will prove. The work will further describe the probable miseries of the people, their relief at the hands of a good ruler, the system of land-tenure, and the mutual rights and duties of a landlord and his tenants in the 15th century.

The King Kalketu of the Chandikāvya poem addressed the following to one Bulān Mandal. It was just as a paternal despot would do.

“¹ O, brother Bulān Mandal, do reside in my city and I shall present you with pieces of kundals (earrings) as a mark of favour. In agriculture seek your convenience first and if it be hard for you to pay my rent yearly, do so after three years. I do allot one tankā (rupee) per plough and have my signature affixed in your document containing the lease. I won't seize your produce from the field,

¹ শুন ভাই বুলান মণ্ডল ।

আইস আমার পুর, সন্তাপ করিব দূর,

কাণে দিব সোণার কুণ্ডল ॥

আমার নগরে বৈস, যত ইচ্ছা চাষ চব,

তিন সন বহি দিহ কর ।

হাল পিছে এক তঙ্কা, কারে না করিহ শঙ্কা,

পাটায় নিশান মোর ধর ।

খন্ডে নাহি নিব বাড়ি, রহে বসে দিব কড়ি,

ডিহীদার নাহি দিব দেশে ।

সেলামী বাঁশগাড়ী, নানা বাজে যত কড়ি,

না লইব ক্ষুজরাট বালে ॥

but shall wait till you pay me off in cowries at your convenience and shall not depute any tax-collector to realise taxes from you. If you really mean to remain in Gujrat, I won't demand anything in the shape of 'Selāmis,' 'Bānsgāris,' 'Pārvanis' and *Panchaks*, and I won't also charge boat-tax, salt-tax, loom-tax, and paddy-cutting tax or demand anything on the plea of mistakes in the account-books. However much you may sell your good paddy, I won't covet its share, nor shall I desire any increase of blind population in my city. I won't take any house-rent from those of you who are new settlers in my city, rather I shall help those amongst you who will pursue agriculture, with paddy, for sowing purposes. I shall verily be a servant of the Brahmins, fulfil everybody's want and duly honour the honourable."

The above supplies a few names for exorbitant and illegal taxes that were taken by oppressive rulers and landlords. Many of these exist even now. 'Selāmi' is a kind of fee taken on all cases of interview with the landlords and is also taken on all cases of land-settlement. *Bānsgāris* are formal possessions of land by publicly thrusting a piece of bamboo into the required spot. *Pārvaṇīs* are dues taken by the landlord upon the rents of the tenants on occasions of religious ceremonies. Now-a-days, the officers of a landlord receive an amount before the pujās which also goes by the same name. *Panchaks* are perhaps one-fifth of the produce of a tenant taken by the landlord.

পার্বনী পঞ্চক বত, গুরা লোন সান্না ভাত,

ধান কাটি কলম কররে ।

বত বেচ ভাল ধান, তার না লইব দান,

অন্ধ নাহি বাড়াইব পুরে ॥

যত প্রজা বৈসে ঘর, তার না লইব কর,

চাষি জনে বাড়ি দিব ধান ।

হইয়া ব্রাহ্মণের দাস, পুরাব সভার আশ,

জনে জনে সাধিব সম্মান ॥

—কবিকঙ্কণের চণ্ডীকাব্য, পৃঃ ৮৪ ।

These dues were taken during the Islamic rule and some exist even now. These might as well be supposed to exist more or less under different names during the pre-Mahomedan period, as at that time too, the despots existed.

CHAPTER XVI

BIRDS.

The tropical land of Bengal abounds with birds in its innumerable jungles and villages ; they delight the fancy of the people and often serve some practical ends, for which the hunters were once ever busy to secure them. Our old literature is full of accounts of many interesting species of birds.¹

A. *The following list of a few of the principal birds will give some idea of them :—*

(1) उक्क² = Parrot (Psittacidæ group) —

This bird is very common in Bengal. The names given to this species in the province are two-fold—Tiyā and Totā. They may be classified into two divisions, *e. g.*, Palæornis cyanocephalus (Lalsirā Totā) and Palæornis torquatus (Totā). These birds are in the habit of laying their eggs in the holes of trees, in the niches or corners of buildings. They live in flocks and often make great damages to crops.³

That this bird caught the fancy of the Bengali people is illustrated by the fact that they used to build the picturesque prow of their ships after this bird. These ships were called the “Śukapañkhi.”⁴ Our folk-literature is replete with stories of the birds

¹ For an elaborate list of the Bengal birds, see among others,—Kavikañkaṇ-
Chandī, the Dharmamañgal poems, the Rāmāyaṇa, ‘Govinda-Chandrer Gīta’ and
the Vaiṣṇava Pada Literature.

² For Parrots see Māṇik Chandra Rājār Gān. See also Kavikañkaṇ Mukunda-
rām’s Chandī Kāvya, p. 63, Baṅgabāsī edition. See also the Dharmamañgal poems
by Rūparām.

³ This bird according to the celebrated ornithologist Frank Finn “are often
extremely destructive to grain and fruit crops.” In spite of its destructive propensity
it is a beloved bird of man. Not only in Bengal but in various other countries it
is highly prized. See also “Birds of an Indian Village” by Douglas Dewar,
pp. 51-52.

⁴ See the Sanskrit work Juktikalpataru by King Bhoja.

Śuka and Sāri.¹ Convention favours the introduction of this bird in the classic poems, as typifying wisdom or prophetic power. Even as late as the middle part of the Eighteenth century we find that Prince Sundara of the Vidya-Sundara story (as described by Bhāratachandra among others) carried with him a Śuka bird in a cage, when he visited Burdwan on the plea of joining a *tol* there. We often find in old paintings young delatantees of fashion carrying in their hands these birds, which sit quiet without chain, having become pet of their proteges. The Vaiṣṇavas are great lovers of this bird as they make it utter the name of “Kṛiṣṇa.” There are poems in which Śuka and Sāri are represented as taking sides with Kṛiṣṇa and Rādhā respectively in their love-quarrel. Our old literature, such as the Chaṇḍi-Kāvya, the Dharmamāṅgal poems and the Mymensingh Ballads are full of references of this bird.

(2) সারি^২ (Mynah):—

Along with Suka the bird Sāri must be mentioned. Probably the word “Sālika,” a common kind of Sāri bird of Bengal, is derived from the word “Sārikā.” Among the various kinds of the bird Sāri, two attract our notice. One is called the wild Mynah (Parbatiyā Mynah) and the other Sālika. The former belongs to the family of Eulabes (and so is not Mynah proper). In England it is known as the Grackle, while the latter (*e.g.*, Sālika or Tardus Sālika or Acridotheres tristis) belongs to the family of the Sturnidæ. Though both the birds can well imitate human voice, it is the former (*e.g.*, the Grackle or Gracula religiose) which can conspicuously do so. People tame both kinds of birds for the purpose of training them to imitate human voice. The poetic tradition which makes the bird “Sāri” wife of “Śuka,” is not founded on facts. They

^১ উপরে বসিল সারি শুক নীচ নিল।

—কাঞ্চনমালা (ঠাকুরদাদার ঝুলি, মিত্রমজুমদার)।

(The bird Sāri took her sit above while the bird Śuka sat below.)—Thākurdādār Jhuli (Kāñchanmālā) by D. Majumdar.

See also for the bird Śuka, Pākhīr Kathā (in Bengali) by S. Law, pp. 3-7, 36, 53 and 191.

^২ See Māṇik Ohandra Rājār Gān:—

সারি শুয়া গেল উড়াও দিয়া।

(Both Sāri and Śuka flew away.)

are birds of different species. The Grackle has got the colour of blackish-grey while some species of the bird *Salika* or the common Mynah are white.

The Mynah builds its nest in the holes of trees with the help of grass, twigs, straw, rags and feathers. It also occupies a nest once occupied by a wood-pecker. It also sometimes builds its nest on houses, walls or even wells. The nest is very untidy to look at. In such a nest the Mynah lays its eggs (four or five blue eggs) during the rains. The rosy or the common sterling does not build its nest in this land as it does not breed here. It breeds in a far-off country in Asia-Minor and from its native place makes a long trip to Bengal during the harvest season. It makes much damage to crops but does some good also by eating locusts and grass-hoppers.¹

(3) পাৰাবত and ঘূষু² (Pigeons and Doves) :—

(a) পাৰাবত, পাৱৰা or কবুতৰ (Pigeons).

(b) ঘূষু (Doves).

(কপোত may signify both the classes.)

Pigeons and doves both belong to the family of Columbinae. So in dealing with the pigeons we cannot avoid the doves. The pigeons or kabutars are of two general types—

(i) *Columba livia* (pigeons).

(ii) *Crocopus phoenicopterus* (the green pigeon or Harial).

(a) The pigeons (kabutar) are nothing but large doves. The pigeons (kabutar) are known to the English as the Indian blue-rock pigeon. A type of pigeon with which people are not very familiar is called Harial (*Crocopus phoenicopterus*). The pigeons are very akin to the doves in their ways of life. The general colour of the plumage of the blue-rock or common pigeon is greyish blue. Its neck has got various forms of green or red.

¹ See for details "Birds of an Indian Village" by D. Dewar, pp. 34-39.

The Sāri was once a favourite bird to the ladies. See ক্রীমদ্ভাগবত, ৫তম স্কন্ধ.

About the auspicious nature of the bird, see the Mahābhārata, Anuśāsan Parva, 104th Canto, 114th śloka.

² That কপোত may signify other birds than পাৰাবত will be seen from the following line :—'পাৰাবত কপোত লিখিল গাঙ্গুলি' (The birds পাৰাবত, কপোত and গাঙ্গুলি, a kind of kite, were painted).—Kavikauṣaṇ's Chaṇḍī Kāvya (Baṅgabāsi ed.), p. 63. See for the reference of ঘূষু or dove in ধৰ্ম্মরাজের গীত by Rūpārām.

From very early times, the people of this country favour the pigeons¹ and our literature is full of their accounts. Even to-day pigeon is a very favourite bird believed to bring good luck to a family. When it builds its nest on the ceiling of a house, it is considered as a piece of good luck by the owner of it. Many people make pigeon-holes while building their houses and in these they are allowed to breed. A kind of pigeon which builds their nesting place on the roofs of a house is called “Jalāli-kabutar.”² A variety of rock-pigeons (commonly known as গোল পায়েরা) is called গিরিবাজ (Giribāj). This kind of pigeon is reared for their excellent acrobatic performances in the air. Dacca was a great centre of such birds. Another variety with such a quality is known as Lotan (লোটন পায়েরা). These birds will rise high up in the air and then make circular movements with head downwards and will show various other feats raising the admiration of the people.³

¹ For a detailed description of the pigeons see “Birds of an Indian Village” by D. Dewar, pp. 79-80.

² There is a tradition that it got its name from the saint Jalaluddin who is said to have first imported it to this country. This Jalaluddin faught against the ill-fated Rājā Ballāl II of Rāmpāl (Bikrampur).

³ See Kavikaṇṭha Mukundarām's Chaṇḍī Kāvya (pp. 115-116, Baṅgabāsi ed.). We find in this work that the owners of the pigeons would give names to their birds. Rather a long and interesting list of such names will be found in Kavikaṇṭha's Chaṇḍī Kāvya. As for the game with these pigeons detailed description will be found in this work in the pages mentioned above. Thus,

লয়ে নিজ পারাবত,	চলে ধনপতি দত্ত,
লড়াইতে নগরিয়া সাথে ।	
করি শুভক্ষণ বেলা,	চড়িয়া পাটের দোলা,
কিঙ্করে পিঞ্জর লৈল সাথে ॥	
খাতিয়ারি সাত-শালিকা	খেত নেতা নয়ান সুখা
করট তামট হলক্ষণ ।	
সোঁজমুখ রজ-গোলা,	শিখরিয়া ঘনলোলা,
মাঙগী হুবলী হৃদর্শন ।	
পারুল্যা বাতাশা হাসা,	নাট্টা খাট্টা বুড়ী ডাসা,
জটা সিদ্ধুরিয়া বনজয়া ।	
নীল কুমুদকুখা	যিরিগি দীঘল-মুখা,
মন-সুখা রাজা দেউলিয়া ॥	

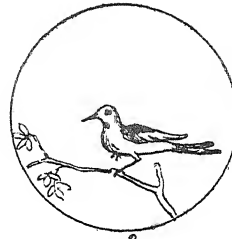
CHAPTER XVI.



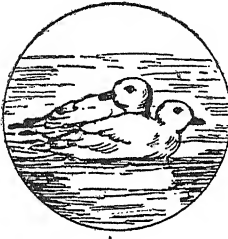
1



2



3



4



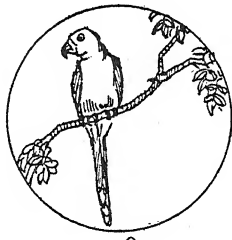
5



6



7



8



9



10



11



12

1. Māchrāṅgā

2. Pechaka

3. Khañjana

4. Chakrabāka

5. Baka

6. Balākā

7. Kaṅka

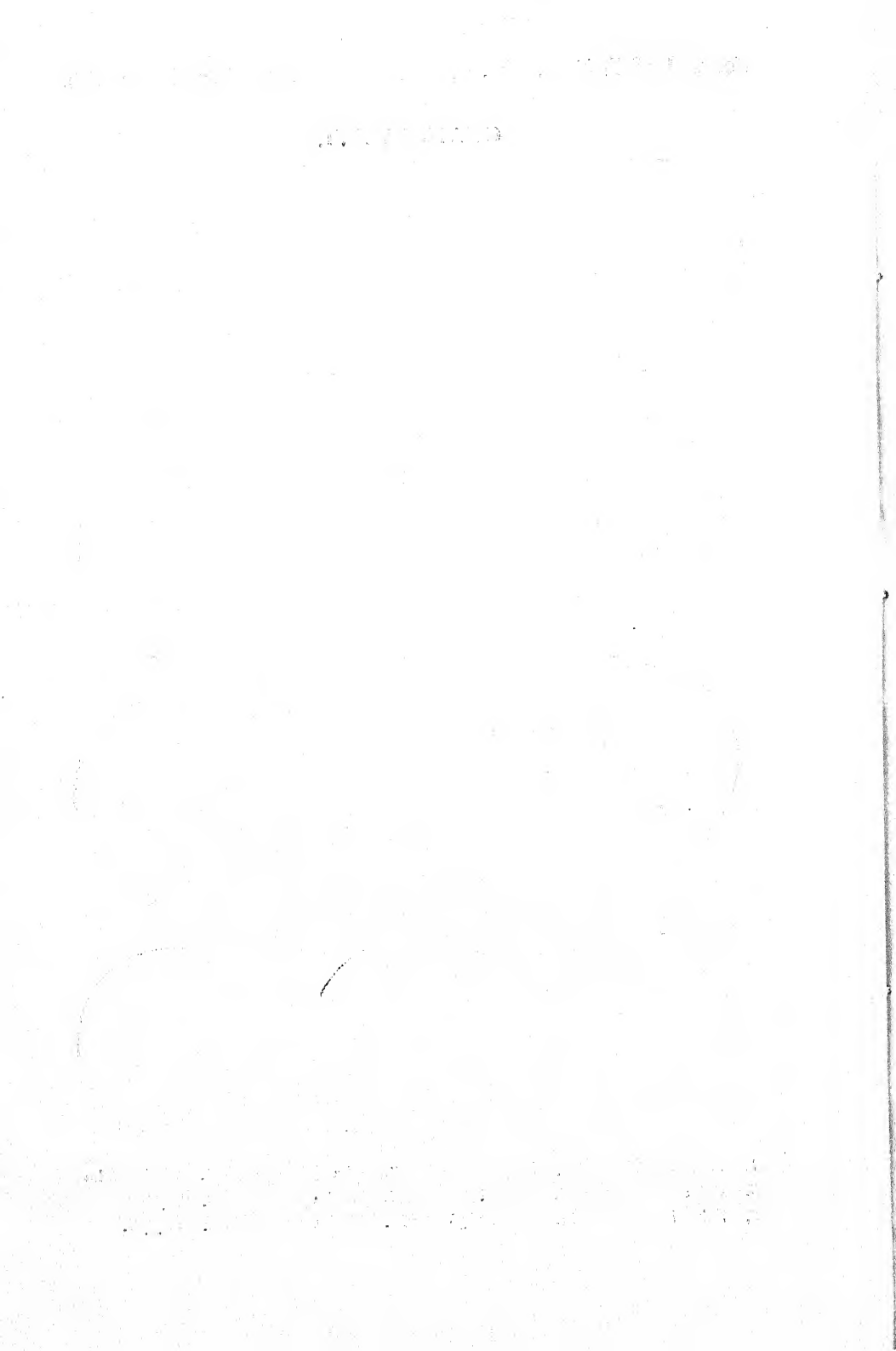
8. Tiyā

9. Sakuni

10. Bhuchāṅgā

11. Kokila

12. Pāpiyā.



The pigeons have always been favoured by monarchs of all ages. We know from 'Ain-i-Akbari' that the Emperor Akbar (16th century) collected more than 20,000 pigeons in his aviary which was then very well-known. Akbar's efforts brought into existence the classes of pigeons known as Lakkā, Lotan, Parpā and others. The Lakkā pigeons are known for their proud gait of the head when moving. Its note also is very pleasing.

The Lotan pigeons are of two kinds, and as mentioned before, are noted for their acrobatic performances on the ground and in the sky. These are all thrown down on the ground and the trained ones spring up with head downwards and body upwards in a curious manner. Pigeons are trained to serve man as couriers. It is well-known to serve man in this capacity very faithfully.¹

(b) বুঝু^২ (Doves):—

The doves like the pigeons are very common birds of Bengal and feed on grain. Though it is called 'Ghughu' in Bengal, it is known variously as 'Fakhta,' 'Gugu,' and 'Perki' in the up-country. There are many kinds of doves of which some are spotted, some brown and some red. The size of the dove is like that of the Mynah. Usually there is very little difference in appearance between the cock-bird and the hen. The dove is not very expert in making

সিংহাবাঘা রণজিতা কয়রা কপাল চিতা,
 সিদ্ধ মাট্টা পাড়ুশা পাখরা ।
 মাণিক দোমলি মুড়া, আভাঙ্গা পরসা ছড়া,
 পালট বিলাট বহিভোর ॥
 পাঙসী পাখরি টাজি, হাঁসী ভাসী বুড়ি রাঙ্গি,
 নানারঙ্গে লইল পায়রী ।

—কবিকল্প চণ্ডী (বঙ্গবাসী), পৃঃ ১১৫ ।

¹ See Encyclo. Brit., Vol. XXXI (10th ed.), p. 770, about carrier pigeons. See also Kautilay's Arthaśāstra. See also *Lectures pour Tour* by Armand Rio. It is peculiar that a kind of beautiful pigeons which is native to New Guinea bears the name of 'Goura.' Cf. The ancient name of Bengal.

See also The Eastern Bengal Ballads, Part III, Bhelūā, p. 68, in which a pigeon has been described as reciting the 'Bayets' of the Korān.

² See Dharmarāj Gīt by Rūparām :—

‘কোকিল খঞ্জন ঘুঘু চিল কাক পাখী ।’

(The birds Koel, Wagtail, Dove, Kite and Crow.)

nests. It builds its nest on scanty materials and twigs which are very few in number. This bird brings up broods many times a year. Usually it lays two eggs which are white. Doves not only build their nests on trees but also in buildings if there is any suitable place for them. They once served as couriers ¹ like the pigeons which are famous in this respect.

(4) The birds of prey (Accipitres family):—

The birds belonging to the family of “Accipitres” are generally known as the birds of prey. This group is also capable of subdivision into at least three branches, *e.g.*, “Vulturidæ,” “Falconidæ,” and “Pandionidæ.” In the medical works of Charaka and Suśruta, we find these birds of prey are classed as *ঐশহ* (*i.e.*, birds which take their food with the help of their beaks and by a sudden descent on the prey) and further subdivided it into “*গৃধ্র*” (Vulturidæ), *শ্বেন* (Falconidæ) and “*কুরর*” (Pandionidæ), curiously befitting the western subdivision of later times as mentioned above.

(a) *গৃধ্র* or *শকুনি* (Vulturidæ):—

Although *শকুনি*, *শকুন*, or *শকুন্ত* sometimes means in Sanskrit literature any bird, still in a more limited sense *শকুনি* signifies birds of the *গৃধ্র* (Vulturidæ) family. The head of this bird is more or less bare or only clothed with short stubby down.²

There are various kinds of vultures. One is called *গৃধ্রিনী* or *রাজগীধ* (*Otogyps calvus*). Another kind of vulture is known as *শকুনি*

¹ See *যুগচরিত্র* by Bhabānanda Sen, C. U. MS. No. 1021, Fol. 2:—

এত বাক্য রাখা কয়, যুগ পক্ষি সবিস্ময়,
চলে পক্ষ শ্রীহরি বলিয়া ।
* * * * *
বায়ুপথে চলে পক্ষি পবনে ভর দিয়া ।
হেনকালে নয়চান আইল একজন ।
তাড়াতাড়ি করে পক্ষি উপরে গমন ।
* * * * *
গগণেতে ঈগল নয়চানে যুদ্ধ হয় ।
অরিপক্ষ তার কাছে মানে পরাজয় ।
রুকপক্ষ যুগ লয়া করিল বিজয় ॥ ইত্যাদি ।

² See Blandford's Fauna of British India, Birds, Vol. III.

(*Pseudogyps Bengalensis*).¹ This bird differs from the above bird in the absence of the red wattles. The colour of its head and neck is blackish grey but the back is white. Another kind of vulture is smaller than those two in size, shape and colour. "Its bare head, neck and bill are yellow, the plumage is dirty white with some black on the wing. Young birds are black; when they are about a year old, they lose their black feathers and get white ones instead."² This is also called শকুনি in Bengal and *Neophron ginginianus* in the up-country. Vultures used to nest in cold weather, which is not the practice with many birds in this country. But they may build roosting place on high trees even in the rainy season.

(b) শূন (Falconidæ) :—

Among many kinds of birds belonging to the group of Falconidæ we notice the following :—

(i) চিল³ (Kite, *Milvus govinda*) :—

The kite has got a beak which resembles that of the eagle. It is a bird of prey and as such its beak is made in a way befitting its mode of life, *i.e.*, seizing and tearing its prey by swooping down upon it. The kite feeds on flesh. But it is also known to catch fish for its livelihood. Just at the end of the rainy season in Bengal the kites hover in the sky and give out a shrill sound which is taken by the people as indicative of good number of fish to be available, and their expectations seldom fail in this respect. The bird is larger in size than the crow and is in the habit of pouncing upon its prey which it catches with the help of its big talons. The kites make nests in February or somewhat earlier and breed in the same month. The bird lays two eggs at a time. A kind of kite is known as শঙ্কর চিল or গরুড়(?)⁴ in Bengal which is also

¹ There is a belief current in Bengal that a শকুনি will never touch a carcass first but will invariably wait for a গৃধিনী for the purpose.

² See "Birds of an Indian Village" by Dewar, pp. 71-72.

³ See Dharmarāj Gīt by Rūpārām. For শঙ্কর চিল see Govindachandrer Gīt. It is otherwise known as শঙ্ক চিল as we find in this work. According to popular belief শঙ্ক চিল is auspicious to look at during the commenment of a journey while contrary is apprehended as regards another kind of kite called ডোমচিল. See বৃহদ্রশ্মপুরাণ, উত্তর খণ্ড, ৬৪৭. For ডোমচিল see Kavikāṅkaṇ's Chāṇḍī Kavya, p. 114 (C. U. edition).

⁴ বামদিকে লিখিল গরুড় মহাবীর।

—কবিকঙ্কণের চণ্ডীকাব্য, পৃঃ ৩৩ (বঙ্গবাসী)।

(Towards the left was painted the hero Garuḍa.)

known as “ব্রাহ্মণি চিল,” “ধোবিয়া চিল” or “কহ্মুবারক” in the up-country. It is very fine bird to look at. It is white in its head and shoulders and brown in its wings. Probably this kind of kite is known as “গুরুড়” in South India, evidently because its colour resembles that of the fabulous bird of Hindu Mythology. It is in the habit of living by the side of water as it lives on fish. Both the ordinary and the Sankara Kite build rather ugly looking nests high up on trees—the latter preferably by the side of some water-courses. The kite has got mischievous habit of swooping down upon any basket of eatables. It is a strong bird and can rise very high in the air.

(ii) শিক্রা or বাজ (Sikrā, Hawk or Astur badius) :—

The Hawks (a variety of which is known as Buzzards) are allied to the Falcons and both are known by the common term of বাজ, শিক্রা or শয়চান¹ in Bengal. There are many varieties of this bird.

The Śikrā feeds on small birds. It also lives on lizards, rats and grasshoppers. The hawk has got a very harsh sound. Its nesting time is from April to June and it is usually in the habit of laying four eggs at a time. These eggs are white in colour with patches of reddish brown. The Śikrā is not a migratory bird and is trained to catch quails and partridges. This bird is so brave that it will attack another much bigger than it. It is smaller in size than the crow.

(iii) ওয়াক্ or ওয়ব² (Twany Eagle, Aquila Vindhiana) :—

A kind of bird of prey is called ওয়াক্ or ওয়ব (Wokhab, the tawny eagle). It has got feathery legs and resemble a kite in appearance. It lays two eggs of white colour with spots of dull-brown. It sometimes swoops down upon the ducks when they swim in a pond and takes one of them away in talons. It has

Though the poet here probably means the mythological hero, still it may be presumed that a kind of kite was known as such. In Southern India by Garuḍa is still meant a kind of kite.

(See D. Dewar's “Birds of an Indian Village.”)

¹ See যুচরিত্র by Bhabānanda Sen, C. U. MS. No. 1021, Fol. 2. See also the Dharmamaṅgal poems by Ghanarām,—“বায় সত্য ব্রহ্মিতে শয়চান হ'ল ধর্ম” (To learn whose truth the god Dharma took the appearance of a Sayachān).

See যুচরিত্র by Bhabānanda Sen, C. U. MS. No. 1021, Fol. 2.

got a very harsh and shrill note and is unpopular with all small birds which sometimes attack it in combination.

Hawking or Falconry was a favourite pastime in bygone days. The hawks were admirably trained by their owners to catch other birds and it was considered a great amusement in the past. The Emperor Akbar (16th century) was much interested in these birds as he was with all birds and laid down strict rules about the quantity of food which each kind of falcon under his care was to receive. Besides he fixed the prices of the falcons and hawks. It is well-known that some of these birds of prey are migratory while some remain in the country all the year round. It is also an interesting fact that the female of these birds are bigger in size and stronger physically than their males. To a falconer, therefore, the female bird of prey of worth more than the male one.

In the শৈনিক শাস্ত্র (a treatise on falconry brought to light by MM. H. P. Śāstri) supposed to be written by Rudrachandra Deva (who flourished sometime between the 13th-16th century), a Rājā of Kurmachala or Kumaun, may be found a very valuable and elaborate description regarding the maintenance of the শ্বেন birds or the hawks. This work contains, among others, various instructions about the aviary, food and health of these birds.¹

(c) কুরর, কোড়া or কুরা (Pandionidæ, a kind of Osprey) : —

The bird Kurā or Osprey, as stated before, belongs to the group of Pandionidæ. This bird was once a great favourite of the Bengalis as the references in the Mymensingh Ballads² will go to show.

¹ “বাজাদি কলবিদ্ধাদেমাৎসংনাতিচিরস্থিতম্ ।

লঘুৰুচ্যং প্রদাতব্যং যথা পরিণামে জ্ঞাতা ॥

পুষ্ট্যে অবরুদ্ধয়েদেবাং মাত্রামথ শনৈঃ শনৈঃ ।

স্নানার্থং বারিপূর্ণাশ্চ স্থাপয়েৎ কুণ্ডিকাঃ পুরঃ ॥”

—শৈনিক শাস্ত্র, ৫ম পরিচ্ছেদ, ২৪-২৬ শ্লোক ।

(The meat intended for the birds of prey should not be unduly stale. This should be light, delicious and wholesome. The quantity of food should be gradually increased for their nutrition. For their bath basin-full of water should be kept near them.)

² ভাইয়ের কাছে পত্র লেখে সন্ধান করিয়া ।

বহু করি পালা কোড়া দিল উড়াইয়া ॥

How this bird when trained, catch other birds of the same species, is an amusing fact and has been referred to elsewhere. This bird frequent the marshes of Bengal and catches fish. It has got a very shrill note and is not more big than the kite in size. The proper season to go in quest of Kurās is the rainy season.¹ The Ospreys differ from the Falcons in the wings and the talons. The Ospreys have got a very sharp sight which help them in catching fish from the pools and marshes. A kind of eagle known as the fishing eagle is also classed with the osprey as its talons and habits resemble those of the osprey. This eagle (*Polioaetus*) unlike other eagles (*Haliaetus*) take fish as its staple food. Thus it sometimes happens that when the common osprey catches fish from a river and rises up to the sky the fishing eagle or the fish-hawk (which is also a kind of osprey) robs it of its prize.

পঞ্চভাইয়ে পত্র পাইয়া পালাই নাও করে ।

ছল করিয়া তারা কোড়া শিকার ধরে ॥

বিস্তার ধলাই বিল পদ্মফুলে ভরা ।

কোড়া শিকার করিতে দেওয়ান বায় হুপুরবেলা ॥

—মল্লুয়া, p. 86, Mymensing Ballads (Bengali version), Part I.

(The girl Maluā being kept by the Dewan under his clutches without her consent, contrived to send a Koḍā with a letter to her brothers, for her rescue. Her five brothers received the note and came to the Dhalai marsh to meet their sister Maluā, but apparantly to catch the Koḍā birds. As expected, the Dewan also came to the very marsh (which was both big and full of lotuses) for the same purpose of hunting the Koḍā birds at noon.)

The above shows that the bird Kḍā was also employed as the courier-bird to carry letters just like the pigeons. The Dewan's visit of the Dhalai marsh in quest of Koḍās is a proof that even the rich partook in the pastime of hunting Koḍās for the sake of pleasure.

¹ আইল আষাঢ় মাস জলের বাড়ি ফেন ।

কুড়ার ডাকেতে শুনে বর্ষার নমুনা ॥

—মল্লুয়া, পৃ: ৪৬, ময়মনসিংহ গীতিকা, ১ম ভাগ ।

(The month of Aṣāḍha, i.e., June-July came and with it the water began to increase. The Kuḍā birds began to utter their cry at this time, thus showing that the rains have set in.)

—Maluā, p. 46.

(5) হংস ¹ (Goose and Duck):—

Among the two chief species of the bird হংস as found in Bengal, the bigger one is known as the রাজহংস (the grey goose) and the smaller one as the পাতিহংস (the duck). These birds, specially the smaller ones, are kept in large numbers by people of the countryside for their eggs. They are in the habit of sporting in water.² The popular tradition about these birds is that they can separate milk from water when both remain mixed up.³ The bird রাজহংস is migratory⁴ in nature and the poetic tradition (which is also corroborated by facts) ascribes their journey to the lake Mānasa during the rains—"বর্ষাসু মানসং যান্তি হংসাঃ।"

(6) জলপিপি ⁵ (Metopidius Indicus) :—

Along with the birds mentioned above, another kind may here be noticed which is known in Bengal as জলপিপি (Metopidius Indicus). In Sanskrit literature the bird is known as the কারণ্ডব. In outward appearance জলপিপি resembles সারস (Sāras) and to some extent পানকোড়ি (Phalacrocorax Javanicus). The bird জলপিপি has got the head of a crow, long legs, and black colour. It visits the marshes which abounds with the floating lotus-leaves

¹ See a Pada by Govinda Dāsa, Padakalpataru, p. 769.

² See also—নিখল স্তম্ভাসিত বমুনার জল।
রাজহংস কেলি করে পল্ল উৎপল।

—কৃত্তিবাসী রামায়ণ।

(In the clear and sparkling water of the Jamunā, the geese were merrily sporting with the lotuses.)

—The Rāmāyaṇa by Kṛttivāsa, C. U. MS. No. 43, Fol. 6.

See also—রাজহংস রাজহংসী ক্রীড়া করে ভলে।

কৃত্তিবাসী রামায়ণ, আরণ্যকাণ্ড।

(The male and female geese were sporting in water.)

³ নীর ক্ষীর হংসন পান বিধায়ন,
কোন পৃথক করি পারত।

—মাধো, পদকল্পতরু, পৃঃ ৬২৪।

(Who can distinguish the milk from water like the ducks, when engaged in drinking?)

⁴ The migratory nature of these birds makes them suitable messengers for love-errands, by our poets. See হংসদূত by নরসিংহ দাস, C. U. MS. No. 989, Fol. 17. Cf. The Sanskrit story of Nala-Damayanti.

⁵ বাউই পাউই শিখি পক্ষী হরিতাল।

—কৃত্তিবাসী রামায়ণ, উত্তরাকাণ্ড।

See পাখীর কথা by S. Law,

on which it walks. It moves with great rapidity and lightness of foot over the lotus-leaves and is semi-aquatic in character.

(7) পানকৌড়ি¹ (Phalacrocorax Javanicus) :—

According to some this bird was known to the poets of Sanskrit literature as the কার্ণব. Its colour is black but its head does not resemble that of the crow, neither its legs are long, which are attributed to কার্ণব. A kind of পানকৌড়ি is known as বনমুরগী, বহুকুট or ভাস (the water-hen or Anaeronisphœnicurus). It is also known as the Kināti in the up-country. It is a very shy bird and always tries to avoid human observation. It is usually a very quiet bird but very noisy during the monsoon. It loves to swim in water. Its nest is a clumsy structure usually made in a bamboo-grove, thick bush or a palm tree.

(8) (a) সারস² (Sāras—a kind of crane) :—

The Sāras is a kind of crane which is allied to the heron and the stork. This bird has got a long beak and loud note.³ It is very fond of living by the side of water. The bird is known for its intense love for its companion when in pair. It pairs for life and it is said that when one of a pair dies, the other bird does not long survive the shock. The Sāras though live in pairs, sometimes also remain in large numbers and usually frequent the marshy grounds or swamps or large lakes. The bird has got a very loud note which resembles the sound of a trumpet. It usually lays two eggs (one male and the other female) during the months of July, August and September. When hatched the two birds live together till death.

¹ See Govindachandrer Git for পানকৌড়ি which is otherwise known as পাণিলিয়া in Orissa side.

² (a) See গৃধিনী ও পেচকের কলহ, উত্তরাকাণ্ড, কৃত্তিবাসী রামায়ণ ।

(b) সরোবরে সরসিজগণ দিল দেখা ।

হংস সারস পড়ে মেলি হুই পাখা ॥

—যতুনন্দন দাসের পদ, পদকল্পতরু, পৃ: ৪২৫ ।

(There were lotuses in the lake and in it the swans and the cranes fell with outstretched wings.)

(c) See also a pada by গোবিন্দদাস, পদকল্পতরু, পৃ: ৭৬৯.

³ The loud note of সারস is its characteristic feature as the expression ঝঞ্ঝ খুর্জ লেখা সারস সরব does signify (ধর্মরাজের গীত by রূপরাম).

(b) বক (Heron—Ardea Nivea) :—¹

The heron (বক) is usually known as the crane, though the cranes belong to a different family. There are various kinds of herons (বক) some of which are noticed below. These are বলাকা (small crane), বৃহৎ শুভ্র বক (Large Egrets), ক্রৌঞ্চ (Pond-heron or Ardeda grayi), and কঙ্ক (Ardea manillensis).

The long neck of the heron is “s”-like in curvature. The sound of বলাকা is very harsh. Usually its shrill note is heard when it is flying in the sky. But its note is also heard from marshes in the morning and evening. For its very note it has got the name of “কহ” (literally ‘making sound in water’). The bird বলাকা pairs during the rainy season.

(c) কঙ্ক (Ardea manillensis) :—

The bird কঙ্ক possesses ash colour with reddish tint on its back, wings and tail.² In ancient times the feathers of this bird were used for decorative purposes, especially for decorating the arrows. Now-a-days the feathers of a heron are worn on the headdress of the rich people all over the world. The word কঙ্ক in the sense of বক is even to be found in the Vedic literature.

(d) ক্রৌঞ্চ (Pond-heron or Ardeola grayi) :—

This bird is known in Bengal as কৌচবক, though some Sanskrit annotators such as উল্লাসচাঁদ্য thinks কৌচবক as the female ক্রৌঞ্চ. The Pond-herons are also known as the Squacco-herons and are smaller in size than the true herons and egrets. They remain concealed in the paddy-fields and by the side of the marshes owing to their small

¹ See Kavikāṅkaṇ Chaṇḍī (Baṅgabāṣī edition), p. 63.

শুভ্র র ভারই গোদাভাদ্র লিখে বক।

See also ধ্বজ রাজের গীত by রূপরাম,—

কুহরি কল বক লিখা বড়ি পাঁচ।

See also কৃত্তিবাসী রামায়ণ, উত্তরাকাণ্ড,—

বকাবকী বাহুড় বাহুড়ী হুড়ি টিয়া।

² Cf. উল্লাসচাঁদ্য (the annotator of the Sanskrit work on Surgery called সূশ্রুত-সংহিতা by সূশ্রুত),—“লৌহ পৃষ্ঠো দীর্ঘপাদঃ পক্ষাধঃ পাত্ত্ববর্ণভাবঃ।”

See the line in গৃহিণী ও পেচকের কলহ, উত্তরাকাণ্ড, কৃত্তিবাসী রামায়ণ,—“ধঞ্জন খঞ্জনী কিঞ্চে ধোকড়িয়া কঙ্কঃ।”

The bird sometimes feeds on serpents as the following expression will show :—

“ভূজঙ্গে গিলিয়া লের ধোকড়িয়া কঙ্ক।

—কবিকঙ্কণ চণ্ডী, বঙ্গবাসী, পৃঃ ৩৩।

(The powerful bird কঙ্ক eats serpents.)

size which is like that of an ordinary fowl. Usually they are unsociable but are gregarious during the rainy season which is their breeding season. The plumage of the bird is mud-coloured and its feathers are white. The feathers of the back become reddish during the breeding season. The colour of the bird somewhat resembles that of water, which helps it to catch frogs and fish unnoticed. The bird has got a very keen eyesight. During day time these birds keep themselves apart, but at night a number of them roosts on a tree. The resting season is from the month of April to May. The sound of Pond-herons is harsh and resembles the croak of a frog. A kind of pond-heron is known as the curlew. The curlews are winter visitors to India and utter a very plaintive cry. They¹ move more or less in flocks and leave India at the end of the winter.

Another kind of heron is known as the Egret. The egrets are of many kinds such as Gai Bagla, Bara Bagla, Karchia Bagla, etc. The egrets are a little larger than the paddy bird. The colour of Gai Bagla (গা-বক) or the cattle-egrets is white, bill yellow and legs black. During breeding season it changes its feathers and the new feathers do then resemble the colour of the brick-dust. It is called cattle-bird because it likes to move by the side of cattle when they are grazing in the field. When fresh feathers grow as a result of moulting they seem to be very graceful in appearance and as such are worn by the Indian princes on their turbans together with some jewel.

(9) মাছরাঙ্গা² (The white-browed Fantail or Phipidura albi-frontata) :—

¹ হংসবক শ্রেণী গঙ্গাজল দুগ্ধধারা :

শ্রীশ্রীপদকল্পতরু, পৃ: ৭৩২।

(The orderly lines of the white birds such as the swans and the curlews in their flight resemble the milky flow of the Ganges water.)

² The bird Fantail swoops down to catch fish. Thus,

উড়িয়া পড়িয়া মৎস্য ধরে মাছরাঙ্গা।

—কবিকল্প চণ্ডী, বঙ্গবাসী, পৃ: ৬৩।

(The Fantail bird catches fish by swooping down upon its prey.)

The fondness of this bird for fish is evident from its very name. The following line also supports it. Thus,

মাছরাঙ্গা সদাই উড়ে মুখে যার মাছ।

—ধর্মরাজের গীত, রূপরাম।

For মাছরাঙ্গা see also আরণ্যকাণ্ড, কৃত্তিবাসী রামায়ণ, C. U. MS. No. 43, Fol. 26.

These birds have got very strong bills which are also broad and flat. They catch flies and fish and usually live by the marshes. When it comes down, it outspreads its tail into a fan and dances very elegantly. It has a loud but sweet note. Its nesting time is the summer or the rainy season.

(10) চক্রবাক or চক¹ (Ruddy Sheldrake or Brahminy Duck—*Casarca rutila*) :—

The Brahminy Ducks live in pairs and among each pair great attachment exists for each other. Poets of our country are never tired of describing the liking of these birds for each other. It is believed that the pair lives together during the daytime but remains separate at night on the two banks of a river, where separation causes them to utter plaintive note. This is a mere tradition not supported by facts. According to some, the pair always lives together² “except when they live on the banks of very narrow rivers.”

(11) চাতক or টিটিপক্ষী³ (*Aegithina tiphia*) :—

The bird চাতক is described as looking up to the clouds for a drop of rain.⁴ No such trait of the bird is yet known. But that the bird *Aegithina tiphia* loves to catch water-drops from the rains is a known fact. Therefore it may be that this bird is identified with the bird চাতক. According to many the bird *Coccytes melanoleucus* is identical with চাতক; but it is not true. The bird চাতক breeds in

¹ See a Pada by Govinda Dāsa, *Padakalpataru*, p. 769.

See also the *Chandī Kāvya* by Kavikāṅkaṇ Mukundarām (Baṅgabāsī edition), p. 63.

² See “Game birds of India, Burmah and Ceylon,” Vol. III, p. 129, by Hume and Marshall.

³ See a Pada by Jñānadās, p. 381, *Padakalpataru*.

⁴ (a) ভক্ত চাতক নীল নীরদ, অধিক পূরণ আশ।

—রাধামোহন, পদকল্পতরু, পৃঃ ৭১৮।

(As the bird চাতক wistfully looks unto the black cloud for a drop of rain, so the devotee looks unto the object of his worship with deep devotion.)

(b) চাতক চাতকী জল মাজে বন বন।

—কবিকঙ্কণ চণ্ডী, বঙ্গবাসী, পৃঃ ৬৩।

(Both the male and female চাতক direly needed water.)

(c) See a Pada by Govindadās, Pada No. 1733, p. 514, *Padakalpataru*.

the rainy season. Its note may be heard during the hot month of Chaitra (March-April).¹

(12) চকোর ² (Caccabis Chucar) and তিতির ³ (Francoline Partridge):—

The bird চকোর belongs to the class of Partridge. Its eyelids are very red ⁴ and eyes of the colour of orange. This bird is very common in Bengal. According to the poetic tradition of the country this bird drinks moon-light for its sustenance. Among other birds of the Partridge class may be mentioned তিতির or the Francoline Partridge otherwise known as the Sandpipers or the Lapwing. The sandpipers are of various types. A sandpiper resembles the mynah in size but possesses no tail like it. Its legs are also longer and the greater part of the plumage is of a muddy colour. The sandpiper remains in the plains of India during the cold weather and fly to Kashmir during the summer. There is another kind of Lapwing which is called “Did-you-do-it” by the English. Its bill is red and contains in front of the eyes a large lump of skin. This bird is known as the হিরামণ ⁵ bird. There is yet another kind of this bird whose eyes contain the wattle of yellow colour and is known as the পিলামণ bird. Both kinds of birds catch insects in the fields. These birds lay four eggs in a shallow hole made in the ground during the hot weather. Two other Partridges deserve notice. One is called Grey Partridge and another the Black Partridge. These have got a fine plumage. The call of Partridge is much liked by all and it is very fond of its master. Moreover its cock is a great fighter which attracts men to keep this bird.

¹ চৈত্রে চাতক-পক্ষ পিউ পিউ ডাকে।

—পদকল্পতরু, পৃঃ ২২১।

(In the hot month of Chaitra, the bird চাতক gives out a plaintive note for rain-water.)

² & ³ See Kavikaṅkaṇ Chaṇḍī (Baṅgabāsi), p. 63.

⁴ দুন্নয়ান অরুণ কমল-দল গঞ্জন

খঞ্জন জিনিয়া চকোর।

—রামানন্দ, পদকল্পতরু, পৃঃ ৬৩০।

(The eyes were more red than the red lotus-petals, the eyes of the bird Khañjana, or the eyes of the bird Chakora.)

⁵ See collection of Folk Literature by D. R. Majumdar, e.g., ঠাকুরমার ঝুলি and ঠাকুরদাদার ঝুলি। A kind of fine sādī also bore the name of the bird হিরামণ. See Mymensingh Ballads, ed. by D. C. Sen.

(13) (a) কোকিল¹ (*Eudynamis Honorata*):—

The cuckoo belongs to the Cuculinæ family of birds, or more properly to the family of Phoenicoptainæ which is a branch of the cuculinæ family. The cuckoo which is known in our country is the koel or *Eudynamis Honorata* and belongs to the species of phoenicoptainæ. The koel like all other birds of the cuculinæ family hatch their eggs in the nests of other birds with the latter's help. The পাঁপিয়া, বো-কথা-কণ্ড and some other birds belong to the cuculinæ family and are well-known for their instinct in hatching their eggs in other birds' nests. But the birds of phoenicoptainæ family are not known to possess this propensity save and except the koel who belongs to this group. It is very peculiar that the birds with such instinct as that of koel often keep their eggs in the nests of very small birds whose eggs are naturally smaller than those kept with them. The pretty big eggs of the cuculinæ birds are even found mixed up with the very small eggs of the birds called টুনটুনি (*Orthotomus sutorius*). Similarly the eggs of the bird পাঁপিয়া are kept in the nest of the tiny bird known as the ছাতারে (Jungle Babbler). How these eggs are kept in the nests of other birds is an interesting study. The koel usually puts its eggs, which are evidently smaller, in the nest of the crow. When the koel does so, the male koel usually decoy the female crow from its nest and the female koel seizes this opportunity of keeping its eggs amidst those of the crow. There is no friendship existing between the two kinds of birds and the crow always attacks the koel whenever it meets the latter bird, still, fully knowing that the eggs are not those of the crow, it hatches them and even nurses them when they are very young.²

It rather happens that the young cuckoo sometimes injures the eggs of the crow without any sense of gratitude. Why the cuculinæ

¹ See গুণিনী ও পেচকের কলহ, উত্তরাাকাণ্ড, কুন্তিবানী রামায়ণ।

See ধর্ম্মরাজের গীত, রূপরাম, “নয়ালির সাজসজ্জা”।

² A name of কোকিল is পরভূত. This name is given to the cuckoo because of its hatching and growth in the nests of other birds, e.g. the crow.

Thus,—পরভূতকে ডর পায়স লৈহ কর

বায়স নিয়ড়ে ফুকারি।

—বিদ্যাপতি, পদকল্পতরু, : ৫৫০।পৃ

birds do not hatch their own eggs and entrust this duty even at the hands of the birds who are their avowed enemies, is a biological curiosity. The koel lives on fruits. It is never known to take insects or other creatures as food. The koel, unlike the British cuckoo, is not a migratory bird. Throughout the greater part of the year it remains studiously silent among the thick foliage of trees, being scarcely seen. But during the spring it moves about with gay spirit uttering a very melodious note.¹ That is the reason why the bird is so much associated with spring and specially by the poets of our country. It is peculiar that the male bird utters this mellow note and not the female bird. The koel is very noisy during the breeding season.

(b) পাপিয়া (Brain-fever bird) :—²

We have already referred to the bird Pāpiyā or the Brain-fever bird, otherwise also known as the Hawk-cuckoo (*Hierococcyse vains*). Another kind of this bird is known as the *kālā-pāpiyā* or the Pied-crested cuckoo (*Coccytes jacobinus*). The bird পাপিয়া belongs to the class of cuckoo. This bird has got the size of a Śikrā and closely resemble the latter bird. The call of the bird sounds like 'pāpiyā' for which it is so called. The bird rarely touches ground and lives on insects, figs and fruits. The *kālā-pāpiyā* is a good-looking bird. The pāpiyā lays its eggs in the nest of the seven sisters (or the Jungle Babblers)³ which is a very curious fact as the latter bird is decidedly smaller than the former bird, *i.e.*, the pāpiyā.

¹ বসন্তে কোকিল সব ডাকে কুহু কুহু।

—পদকল্পতরু, পদসংখ্যা ১৭৭৯।

The cuckoo sometimes acted as messengers.

See কোকিলসংবাদ, কবিত্তর, C. U. MSS. No. 884, Fol. 2.

² পাপিয়া পাখির পিয়াদে পীড়িত, সতত পিউ পিউ রাবিয়া।

—পদকল্পতরু, পদসংখ্যা ১৮০৬, পৃঃ ৫৩১।

(The bird pāpiyā always gives out the sound of 'piu, piu,' being exceedingly hirsty.).

See also, পাপিয়া দারুণ পিউ পিউ সেউরণ।

—বিদ্যাপতি, পদসংখ্যা ১৭৩২, পদকল্পতরু।

(The cruel bird pāpiyā utters 'piu, piu' raising pangs of love in the listeners.)

See also a pada by বল্লভদাস, পদকল্পতরু, পৃঃ ২৩৩.

³ Cf. The affinity in the name current in Tipperah side, *e.g.*, আড়া—কেচকেচাশি (আরা—bush or jungle, কেচকেচাশি—babbler).

(14) কাক¹ (Crow) :—

There are two kinds of crows, one of which is bigger and another smaller. Besides crows of many other species such as the *Corvus Insolens* (or the Burmese crow), *Bhuchangas*, etc., are also known. The bigger crow (দাঁড়কাক) or the *Corvus macrorhynchus* is also known as the Corby, Raven or the Jackdaw. The smaller crow (পাতিকাক) or the *Corvus splendens* possesses a gray neck. Both kinds of birds are jet-black in appearance as is known by everybody. The plumage of the bigger crow or corby is rather more glossy than the smaller crow. Both the corby and the common crow live side by side and are common sight in the villages and towns. But the latter is more annoying to the people, for they are always on the lookout to steal all eatables that they may find in a house. The crows are very fond of sucking the honey from the red flowers of the silk-cotton tree (*Simul* tree). Crows live together in crowds in a clump of trees and rise up very early when they are prone to call aloud before they separate for the day. Even during their roosting time they give out a loud sound. The nest of corby is peculiar. It contains hair by way of lining. Crows are in the habit of stealing and eating the eggs of other birds, but they are very careful about their own eggs. Still the koel cheats them in a very peculiar way. The crows usually lay three to five eggs.

There is a kind of crow called the king-crow or the *Bhuchanga* (*Dicrurus ater*). This bird feeds on insects and is very fond of perching on the backs of the cattle when they graze in the fields. Its noise may be heard just before the dawn. While this bird chooses its mate it is very noisy. The bird has a long tail. The king-crow is a great fighter during the nesting season, but otherwise it is not very fond of fighting. Though the king-crow

¹ See কবিকঙ্কণ চণ্ডী, p. 63 (Baṅgabāsi edition).

See also ধর্মরাশের গীত by Rūparām.

N.B.—For a tradition about the misfortune of the crows for having one eye, see কৃত্তিবাসী রামায়ণ (অবোধাকাণ্ড), ed. by D. C. Sen. pp. 127-128.

দেবরূপী বিহঙ্গম লেখে শ্বেতকাক (কবিকঙ্কণ চণ্ডী, বঙ্গবাসী), পৃ: ৬৩। There was painted the divine bird, the white crow.

is very black in colour, yet there is a kind of them which has a white breast.¹

(15) ময়ূর^২ (Peacock):—

Peacocks are of various kinds. Of these, the kind known as the *Pavo cristatus* is very well-known in Bengal. The dance of the peacock, specially of the male one, is very remarkable. Usually the male peacock dances before its female companion with outspread fan.³ The dance is often accompanied by loud screams. The sight of cloud in the sky makes the peacock very gay.⁴ The bird feeds on grain, buds, insects and even on snake. The peacock-feathers are used to decorate the head and ears of the images of the Hindu gods and goddesses as referred to in the *Meghadūta*. It is much used by our people for decorative purposes. This bird is much venerated in various parts of India, and is, therefore, never killed for its feathers.

(16) খঞ্জন^৫ (Wagtail):—

The bird wagtail is very fond of living near water.^৬ It has a very sweet sing-song voice. Its nesting time is from March to May. The wagtail is a migratory bird and comes to our country

¹ See *Manasāmaṅgal* by Ketakadās,—

খেতকাক ঘন ডাকে বিপরীত বাণী ।

(The white crows utter very inauspicious cry.)

N.B.—White crows may generally mean ভুঙ্কা as all-white crows are not to be found although some believe that white crows have been found in Australia.

² See গৃধ্রীণী ও পেচকের বিবাদ, কৃষ্ণিবাসী রামায়ণ, উত্তরাকাণ্ড ।

³ ফেকনা ধরিয় নাচে ময়ূর ময়ূরী ।

(The male and female peacocks dance with their outspread train.)

Also, ময়ূর নাচত মাতিয়া (The peacocks dance madly).

—বিদ্যাপতি, পদসংখ্যা ১৭৩৭, পদকল্পতরু, পৃ: ৫১০ ।

⁴ গগনে গরজে ঘন ফুকে ময়ূর ।

—বিদ্যাপতি, পদকল্পতরু, পদসংখ্যা ১৭৩৪, : ৫১৪ ।

(There was the deep sound of the clouds and the peacocks began to utter their shrill note.) See also *Vidyāpati*, p. 425, *Padakalpataru*.

⁵ See ধর্ম্মরাজের গীত by রূপরাম ।

⁶ See also কবিকঙ্কণ চণ্ডী, বঙ্গবাসী, পৃ: ৬৩—

উড়িয়া কমলে বৈসে খঞ্জনী খঞ্জন ।

(The wagtails both male and female fly and sit upon the lotuses.)

during the winter from over the Himalayas. This bird lives on insects and often lives together in large numbers. The bird is credited with good eyes¹ and dancing propensity by our poets.²

(17) পেচক³ (Owl) :—

The owl (which is of several kinds) is noted for its peculiar habits. Most of the birds pass the day in search of their food and pass the night in sleep. But the owl does the reverse, as it sleeps in some hole during the whole day and keeps itself awake throughout the night in search of prey. It is a bird of prey and feeds on lizards, small birds, etc. The owl has got large ears unlike other birds and can hear well. The owl usually swallows its victims in entirety and nothing remains behind, not even the hair and feather, which it afterwards disgorges.

(18) চড়াই⁴ (Sparrow) :—

Sparrows are common sights in every household. They are tiny birds living on grains, caterpillars and injurious insects. These birds build nests on the roofs of houses only for their eggs and young ones. As soon as a sparrow grows old, it leaves its nest. It is in the habit of roosting on trees in large numbers. Sparrows do not like to roost in one place for a long time.

B. *The Aviary* :—

It seems the Bengalis took much care in making cages. In the *Chandi Kāvya* of Kavikanṭha we find the Rājā of Ujāni (in West Bengal) was anxious to have a suitable golden cage for his birds 'Suka' and 'Sāri' which talked like wise men. To attain his object, so the story goes, he sent the merchant Dhanapati to the Rājā of Gauda (in North Bengal) which was famous for artistic workmanship in making cages. Elaborate description of the way of building a

¹ The bird is noted for its fine reddish eyes. The poets always compare good looks with those of Khañjan (wagtail). See a pada by বাহু ঘোষ, p. 630, Pada-kalpataru. See also a pada by রামানন্দ, p. 633, Pada-kalpataru.

² See পদকল্পতরু, পৃ: ৪২৯—

চঞ্চলগতি খঞ্জন জিতি নৃত্যতি অতি ভঙ্গে ।

—শিবরাম (৭)।

কদম্ব কোটরে বস্তা মাথা নাড়ে পেঁচা ।

—ধর্মরাজের গীত, রূপরাম ।

(Sitting in the cavity of the Kadamba tree the owl was shaking its head.)

⁴ See কবিকঙ্কণ চণ্ডী (বঙ্গবাসী), পৃ: ৬৩. See ধর্মরাজের গীত, রূপরাম ।

cage possessing windows, stands, cups, plates, nets, jars and festoons will be found in the following lines of Kavikaṅkaṇ's *Chandī Kāvya* :—

¹ “The workman made a cage which was very beautiful to look at. It was a foursided one with rows of jars on its roof. He tempered gold by fire and fitted it on the foursides of the cage. Not only the main cage was of gold, but the stand for the bird and the rods used in the cage as well. The drinking cups and plates were also made of the same metal. Festoons of variegated colour fluttered over the gold vases that were placed on the roof of the cage. Inside the cage, the door of which was also made of gold, the small gold bells which were fitted to the feet of the bird ‘Śuka’ gave out a sweet jingling sound. The whole cage looked bright with its yellow colour

গড়ে কারিগর	হুবর্ণপিঞ্জর,
দেখিতে অতি মনোহর ।	
কুস্ত সারি সারি,	অতি মনোহারী
গড়ে চতুঃশালা ঘর ॥	
জালি হুতাশন,	আউটে কাঞ্চন,
চারিভিতে স্বর্ণবাড় ।	
স্বর্ণময় ঘর,	দেখিতে হুম্মর,
পক্ষী বসিবার আড় ॥	
তাতে স্বর্ণকাটি,	বর্ণ দিয়ামোট,
চৌদিকে স্বর্ণের জাল ।	
স্বর্ণজাল বাটি,	অতি পরিপাটি,
স্বর্ণের গড়িল খাল ॥	
স্বর্ণের কলস	দেখিতে রূপস
বিচিত্র পতাকা উড়ে ।	
স্বর্ণের কপাট,	অতি বড় ঝাঁট,
আপন ইচ্ছায় গড়ে ॥	
হুবর্ণ নুপুর,	গড়েন প্রচুর,
চৌদিকে ঝাম ঝাম বাজে ।	
অরুণ বরণ	ভুবন মোহন,
যেন রবিরথ সাজে ॥	
গড়িল পিঞ্জর	নামে বিশ্বস্তর,
নিল রাজসম্মিধানে ।	
দেবতা নিষ্ঠাণ,	অতি অনুপাম,
তাহে দিল চক্ষুদানে ॥	

—কবিকঙ্কণ চণ্ডী, পৃঃ ১৫১ (বঙ্গবাসী) ।

See also, do., pp. 132-133. See also, *Kājalrekha* (Mym. Ballads), pp. 320-321 (Bengali version).

and shone like the chariot of the Sun-god. The cage was called 'Viśvambhara.'

—Kavikaṅkaṇ's *Chandī Kāvya*, p. 151.

It is worthy to note that the Bengalis used to make picturesque homes for their pet birds. The shape of a cage is a special point to note. In the above illustration, we find it was not round but foursided. The Western ornithologists prefer the latter type of cage to the former, as a round cage is not good for the free movement of the birds and is not, therefore, congenial to their health. They are also very particular about the stands, cups and plates. Two kinds of confines are usually made for the birds. One is the common cage and the other is the enclosed space, pretty big, for the convenience of birds of various classes. The latter is particularly known as the aviary, though the former when big, also goes by the same name. The aviary contains tanks and trees for the use of the birds. Sometimes birds are kept in the enclosed verandahs of a building to suit the convenience of the owner.¹

A branch of the Yogi class is known to have migrated from Bengal to Orissa and is understood to carry the traditions of the Pāla kings of Bengal there. Thus in the Oriya version of the *Maynāmatī* songs commonly known as the "Govinda Chandrer Git," sung by those Yogis, is found incidentally a long list of birds and their aviary. The aviary here is described as such :—

"In many fine *pucca* rooms the pigeons and other birds were kept."² Again,

"The big birds were kept in suitable cages. The king himself took care to feed them. Milk, rice, fish and meat were supplied to

¹ See পাখীর কথা by S. Law, pp. 19-29. References to the making of artistic and valuable cages are to be found in *Kādambarī* and other Sanskrit works.

² মেলা কোঠাঘর মান অতি বিতপন।

স এব কপূতা আদি নানা রহ মান।

—গোবিন্দচন্দ্রের গীত

them and a hundred families were engaged by the king for their care.”¹

C. *Methods of catching birds* :—

There are various methods² of catching birds. These are on the whole current even now. We notice a few of these below :

(a) Catching of birds with সাতনলা³ (sātnalā, lit. seven pieces of reeds) :—

In this method the fowler uses seven (or more according to necessity) bamboo pieces to catch certain birds such as the parrots and the mynahs. The man carries a tame female bird in a cage to decoy other birds of the same species. Being attracted by the voice of the tame bird another parrot comes by its side and enters the cage which is placed on a tree by the fowler with the help of his bamboo pieces joined together. The door of the cage suddenly closes and the fowler, who so long remained concealed in the bush, makes his appearance and brings down the cage with the new bird secured in it. Sometimes the fowler takes with him some gum and applies it to a wing of the wild bird by some manœuvre. In this way birds are caught. In rare cases birds are pierced through with a rod one end of which is fitted with a sharp point.

ধাড়ী ধাড়ী পঞ্জরী ভিতরে থুকে ধাঙি ।

তে বহিং কিরাঞ্জন দে আহাৰ ভকতি ॥

দুধভাত মাছ মাংস তপতকে থাই ।

বেণী শত পরিবারে ইহাকু যোগাই ॥

—গোবিন্দচন্দ্রের গীত ।

Cf. Also references in the শৈলিক শাস্ত্র.

² For various methods of catching birds, see Mukundarām Kavikaṅkaṇ's *Chañḍī Kāvya*, pp. 125-126 (Baṅgabāsi ed.).

³ বাসকরে পাতালতায় পাতে নানাছলা ।

আটাকান্দ দিয়াত চালায় সাতনলা ।

পাথে আটা দিয়া ব্যাধ করে নানা কলি ।

উড়িয়া পালায় শুক সারী হৈল বন্দী ॥

—কবিকঙ্কণ চণ্ডী, পৃঃ ১২৬ ।

“An ambush was prepared with the help of leaves and creepers. With the help of gum the fowler used his ‘Sātnalā.’ The wings of the bird Sārī was caught by the gum cleverly managed by the fowler, while the bird Suka flew away.”

—Kavikaṅkaṇ's *Chañḍī Kāvya*, p. 126. (Baṅgabāsi ed.)

(b) Catching of Kuḍās (Ospreys) :—

The most interesting mode of catching the bird that obtains in the countryside is in connection with the bird Kuḍā (a kind of Osprey). This bird is caught with the help of a bird of the same species. In East Bengal and specially in the district of Mymensingh, the catching of these birds was not only a very lucrative profession but also a matter of interest even to the wealthy who often participated in it. It is not the practice to tame a wild Kuḍā for catching other wild Kuḍās. Usually eggs of Kuḍās are collected for the purpose. The eggs are hatched by these birds during the rains in the marshy paddy fields wherein they build their nests. Just after coming out of the shell, these become so strong that they dive at pleasure in the swamps full of water. It is not easy to catch them at this stage, so eggs are only collected. These eggs are hatched in a very curious and artificial way. The eggs are enveloped in cotton and are kept attached to the stomach of a man with the help of a piece of cloth. The heat of the stomach and cotton helps the hatching of the eggs. When hatched in this manner, the young ones become very tame and help in catching other Kuḍās. The fowler takes the tame Kuḍā in a cage and frequents marshy lands in search of wild Kuḍās. The tame Kuḍā being let free decoys a wild Kuḍā when the former hears the sound of the latter, and brings it near enough to be caught by the fowler. Practically the tame Kuḍā seizes the wild Kuḍā by the necks and keeps it in that condition till it is caught by the fowler. In the Mymensingh Ballads we get many references of the catching of these birds.¹

¹ (a) ভাইন হাতে হাইরা পিজরা বাম হাতে কোড়া ।

দুপুইরা কালে বিনোদ পহুে দিল মেলা ॥

—মৈমনসিংহ গীতিকা, ১ম খণ্ড, মল্লুয়া, পৃঃ ৮২ ।

(Chānd Binod took the cage in his right hand and the bird Kuḍā on his left and started from his home for catching this species of birds, at noon.)

—Mym. Ballads, Maluā (Bengali, p. 89.)

(b) হেথা হতে চলে বিনোদ বইনেরে কহিয়া ।

গহিন কাননে গেল কোড়া হাতে লইয়া ॥

দুর্বা ক্ষেত্রে মধ্যে বিনোদ কোড়া হালা দিল ।

হাইরা পিজরা হাতে লইয়া কোড়ারে ছাড়িল ॥

(c) Catching of the bird Doyel (a kind of Robin) :—

The young doyel bird is taken from its nest and is tamed. When it grows old it helps its master to catch other birds of its kind. The owner of the tame bird lets it free from its cage in quest of a wild bird. The tame bird in course of its flight catches a wild doyel when such an opportunity occurs. A fight naturally ensues and both in their struggle fall to the ground upon a piece of cloth already spread out for the purpose by the fowler, who then catches the bird with the help of this cloth.

(d) Netting of birds :—

The usual method for a fowler is to take a net with him and fix it on a tree. One end of it remains at the hand of the man with the help of a long piece of thread. The whole thing is contrived in such a manner that the fowler may let the net fall to the ground any moment he desires. On the ground just beneath the net some grains of paddy are scattered for the birds.¹ When the whole arrangement becomes complete the fowler keeps himself concealed behind some tree with one end of the thread within his grasp and the other attached to a corner of the net as mentioned before. No sooner the birds come and begin to eat the grains than the fowler causes the net to fall upon them and they are instantly caught.

কোড়া না ছাড়িরা বিনোদ কোন কাম করিল ।

বন ছোবার আড়ালে বিনোদ আসিয়া বসিল ॥

মৈমনসিংহ গীতিকা, মল্লয়া, পৃঃ ৮৯ ।

(After taking farewell from his sister Chānd Binod started for the dense forest with a Kuḍā in his hand. There he let loose his Kuḍā from its cage and lay in waiting for any wild Kuḍā behind a bush.)

—Maluā, p. 89, Mym. Ballads (Bengali), Vol. I.

¹ ভিজিত তুল্ল মনে,

কাননে কলাই বনে,

রহে ব্যাধ বোড়ের আহড়ে ।

লুন্ধ ভক্ষণ আসে,

কাঁকে পাখী জালে বৈসে,

নানা বিহঙ্গম বন্দি পড়ে ॥

—কবিকঙ্কণ চণ্ডী, পৃঃ ১২৫ ।

(Fried paddy and beans were spread on the ground by the fowler who kept himself concealed near by. As soon as the birds were attracted there to eat them, they were caught in the net.)

—Kavikāṅkaṇ Chāṇḍī, p. 125.

The nets were once made of the hair of the horses' tail¹ as we find in the old Bengali literature.

D. *Popular beliefs and superstitions as regards birds:—*

Though men have been keeping birds from time immemorial and have been evincing great interest and love for them, still various superstitions have grown among the people of Bengal, which sometimes associate them with evil luck. How these have arisen we do not know. But this much is certain that their superstition has the sanctity of the Śāstras. Thus:—

² “The following birds when sit upon the roof of any house are said to ruin the owner. These are the vulture, the *Ardea manillensis*, the dove, the owl, the hawk, the kite, the bat and the white water-hen. It is believed that either within a fortnight, or within a month,

হর পুচ্ছ লোর কান্দে, শত শত পক্ষী বান্দে ।

—কবিকঙ্কণ চণ্ডী, পৃঃ ১২৬ ।

(Hundreds of birds were caught in the net made of the hair of horses' tail.)

—Kavikāṅkaṇ Chaṇḍī, p. 126.

গৃধ্রং কঙ্কঃ কপোতশ্চ উলুকঃ শ্বেন এব চ ।
চিল্লশ্চ চণ্ডিচিল্লশ্চ ভাসঃ পাণ্ডুর এব চ ॥
গৃহে বস্তু পতন্ত্যেতে গেহং ভস্তু বিপত্ততে ।
পক্ষাঘ্নানাতথা বর্ধাঘ্নাত্তাঃস্তাদ্ গৃহমেধিনঃ ॥
পত্ন্যাঃ পুত্রস্ত বা মৃত্যুজব্যাক্যপি বিনশতি ।
ব্রহ্মণ্য গৃহং দক্ষা দক্ষা তদুন্মাল্যমেব বা ।
গৃহীন্নাদ্যদি রোচেত শান্তিক্রমাৎ প্রয়োজয়েৎ ॥
মাংসান্ধীনী সমাদায় শ্মশানাদ্ গৃধ্রবায়নাঃ ।
শৃগালোহিথবা মধ্যে পুরস্ত প্রবিশন্তিচৎ ।
বিকিরন্তি গৃহাদৌ চ শ্মশানং সা মহী ভবেৎ ॥

—মৎস্তপুরাণ ।

As the above birds are believed to be inauspicious under certain circumstances so the birds শঙ্খচিল and খঞ্জর are auspicious during the beginning of a journey. But ডোমচিল is inauspicious as mentioned before.

or within a year—the owner of the house, or his wife, or his son will lose his or her life and wealth. To save oneself from such a dire calamity either the house or its value is to be given away to a Brahmin. Again, if a vulture, a crow, a dog or a jackal brings a piece of flesh or bone from a cremation ground to any town or throw such a thing into any house, then the place where it is so done turns into a cremation ground (*i.e.*, pestilence occurs in the locality as its result).”—*Matsyapurāṇa*.

¹ “If any hears the note of a crow only once it is a very bad omen, as it will bring sorrow to the hearer. If any householder sees the pairing of crows, or sees a crow of white colour, or sees an owl falling upon his house or sitting upon it, then his loss of wealth and even death is imminent. Under the circumstances, the sufferer should perform proper ceremonies to ward off the evil.”

—*Jyotistattva*.

There are many works of Sanskrit which deal with these omens and which are known to almost every household of Bengal even to

^১ কাকশৈকরবজ্রাবঃ প্রভাতে দুঃখদায়কঃ ।

কাকো মৈথুনকালভঃ ষ্ঠেভো বা যদি দৃগুতে ॥

উলূকো বসতে যত্র নিপতেহা তথাগৃহে ।

জ্যেয়ো গৃহপতে সূত্বাধননাশকৃত্বৈব চ ॥

—জ্যোতিষতত্ত্বাঃ ।

শ্বেতকাক ঘন ভাকে বিপরীত বাণী ।

তাঁহারে আঁরতি করে বেহুলা নাচনী ॥

—কেশবকাদাসের মনসামঙ্গল ।

(The ominous sound of the white crow uttered repeatedly made Behula, the expert dancer, nervous, for which she prayed unto the bird.)

কেব রাম হয় হস্ত লোচন হৃন্দর ।

বামদিকে করিতেছে খঞ্জন গমন ॥

বিষম কুশরবন দেখি করি ভয় ।

নানা অমঙ্গল দেখি না জানি কি হয় ॥

—কৃত্তিবাসী রামায়ণ, অরণ্যকাণ্ড (D. C. Sen's ed.), p. 177.

(O Bama, why do my hands and eyes quake, why does the bird khanjana (wagtail) go by our left side? I am afraid of the vast Kusa forest. We are witnessing many bad omens. Fate knows what is in store for us.)

this day. Besides the above we also know that the pigeons when build their nests in a house are taken as a sign of good luck. It is generally believed that the pigeons do never live in a house which is unlucky. It is peculiar that the dove (বুধু) though belong to the same family, on the other hand, is known as 'গৃহনাশন', 'ভীষণ', 'অগ্নিসংহার', 'দহন', etc.¹ There is a work on the omens in Sanskrit which is called কাঞ্চরিত্র. It takes into account all the notes of the crow and describes at length their significance in connection with the fates of men. Even the Thugs, a class of dangerous robbers of the 18th century in India, believed very strongly in these omens when going out for strangling men and thought particularly auspicious the sound of an owl.²

We have seen birds are liked and sought for, both from the standpoint of utility as well as pleasure. Birds help men to kill many injurious reptiles and insects, to catch the desired prey and to carry messages from one place to another. In the jungles of Eastern Bengal which become inaccessible to people during the rains, it is with the help of some trained birds that messages are sent. Birds are sometimes believed to indicate good and bad omens in regard to human destiny. Besides all these there is an æsthetic side which can never be overlooked. It is said that the rudimentary notes³ of the Hindu music have its origin partly in the sounds of birds. Among

¹ See পাখীর কথা (লাহা), পৃ: ১৫৭.

² See confessions of Ameer Ali the Thug, p. 29, by Colonel Meadows Taylor.

১ সপ্তস্বর রূপ জান সাম্য ধ্বনি মতে ।

শিখী কহে বড়জ্বর বিখ্যাত জগতে ॥

চাতক ঝষড হয় ছাগ গাঙ্গার ।

ক্রৌঞ্চ মধ্যমাখ্যা পিক পঞ্চম প্রকার ॥

ভেক ধৈবত হস্তী নিষাদ স্বর কর ।

স্বররূপ ঐছে কেহো অশ্রমত কর ॥

—ভক্তিরত্নাকর (নরহরি চক্রবর্তী), পঞ্চম তরঙ্গ, পৃ: ৩৪৩ ।

দামোদরস্ত ।—

ময়ূর বৃষভচ্ছাগ ক্রৌঞ্চ কোকিল বাজিন: ।

মাতঙ্গশ্চ ক্রমেনাহ স্বরানেন্তান্ হৃদ্বর্গমান্ ইতি ॥

—ভক্তিরত্নাকর (নরহরি চক্রবর্তী), পঞ্চম তরঙ্গ, পৃ: ৩৪৪—৩৪৫ ।

the seven notes, no less than four are taken from the birds and the rest from the beasts. The birds are the peacock, the Chātaka (*Aegithina tiphia*), Crauñcha (Pond-heron) and the koel (*Eudynamis honorata*). According to some these birds are three in number and then the bird Chātaka is omitted from the list. Among the animals the elephant, the goat and the frog supply the ideal note, according to some, while according to others, the frog is omitted, and the horse and the bull are added to the list. Thus the lower animals amongst which most prominently the birds have played an important part in the æsthetic culture of men, helping them in the noted gradation of sounds in their higher music.

A CRITICAL STUDY OF THE SONGS OF JNANADAS

BY

BISWAPATI CHAUDHURI, M.A.

The songs of Jnanadas though not so numerous as those of Chandidas, Vidyapati and Govindadas, deserve to be studied critically by reason of their intrinsic merit and excellence. Apart from their importance from the philological standpoint, these songs of Jnanadas are so artistic in form, so full of lyrical subtleties and poetic emotions that a critical estimate of their merit as literary productions may fittingly form the subject of an independent paper. Then again, the metres of Jnanadas like those of the other Vaisnava poets are so characteristic of the school and so novel in their form and arrangement, diviating so widely from the trodden path of the Sanskrit metrical system, that a comparative study of Sanskrit and indigenous Bengali rhetoric and prosody may prove to be highly interesting ; the origin and nature of that peculiar language called Brajabuli, in which Jnanadas wrote most of his masterly poems may again be discussed in a separate paper. But before such advanced studies on the lines, indicated above, may be undertaken, there is an initial difficulty in the way, which should be combated. Although there are several printed editions of Jnanadas, not to speak of the standard anthologies of Vaisnava songs, such as, the Padakalpataru, the Padakalpalatika, the Vaisnavapadalahari, the Gaurapadatarangini, the Padāmṛtasamudra, etc., where Jnanadas's songs are found incorporated, the readings of the songs of Jnanadas, as founded in these editions, vary so much from one another that it is often extremely difficult to say which of these represents the correct text. In order that textual inaccuracies may be avoided, as far as possible, there should be a serious attempt to examine all the available editions of Jnanadas and the printed anthologies of

Vaisnava songs with the help of the old manuscripts lying in the libraries of the Calcutta University, the Sāhitya-Parishad of Calcutta and other educational institutions.

The present report will show some of the results that I was able to arrive at by pursuing my studies in this direction. In this report differences in readings presented by the various published editions and the old manuscripts with regard to as many as thirty-nine songs of Jnanadas have been pointed out, the authorship of certain songs has been discussed and twenty-seven unpublished songs of Jnanadas have been noticed.

1. In view of the different readings and Bhanitās presented, a regular wilderness has been created in the field requiring utmost caution and scientific treatment of the subject in order to solve the problem of authorship as well as of correct reading of the texts. First of all, let us take into account the discrepancies found in the texts and their colophon.

2. We are to find out the tests for ascertaining the accurate reading and for solving the question of authorship. About the former it is a fact which will be admitted by all that there is a style and mannerism peculiar to every great poet which may be distinguished by those who are quite familiar with his poetry. This test is not always reliable as imitators often copy the style of a great master so successfully as to baffle all scientific classification. But the best poems of a poet have the stamp of their individuality which is inimitable. Hence, this test though not fully satisfactory may help us a good deal in finding out the truth.

3. The second test is that of the time to which particular manuscripts can be assigned. The older the manuscripts, the more reliable will be the text. This will not only help us in finding out facts about the style of a poet but also in solving the question of authorship. The readings of the old Mss. must be respected.

In the case of Jnanadas, his great rival in the field is Chandidas. Jnanadas has very frequently given new recensions of Chandidas's poems. After about two hundred years which separate the period of Chandidas from that of Jnanadas it was found necessary to make new recensions of the former's poems to keep them up-to-date for the purpose of singing. Jnanadas gave new garb to the songs of the

earlier poet. Hence so often we find the poems of Chandidas and Jnanadas forming a tangle in their colophon as regards their authorship. Jnanadas had a high aesthetic culture and a fine ear for music. So he sometimes added some grace to the poems of Chandidas by introducing changes in them.

By application of such tests and others that may arise in course of our researches we shall discourse on the various points at issue and ascertain the truth about the poets and the correctness of their texts. But now let us concern ourselves solely with the different readings at our initial stage of enquiry.

(1) The following song has been found in the Sahitya-Parishad Manuscript No. 201 :—

আজু কেনে তোমাকে এমন দেখি ।
 আলসে আলপ বুজিছ আঁখি ॥
 অঙ্গ মোড়া দিয়া কহিছ কথা ।
 না জানি হিয়ায়ে কেমন ব্যথা ॥
 মনে কিবা লাগিয়াছে ।
 দোস দিঠে কেবা দেখিয়াছে ॥
 বসন সযন না রহে গায় ।
 রসের অঙ্কুর উপজু তায় ॥
 কাজের কথা না কহ লাজে ।
 মরম জনার মরমে বাজে ॥
 কালা কালুর পথে যে জন যায় ।
 গায়ের বাতাসে চমক পায় ॥
 তার ভাবে যদি এমন জান ।
 জ্ঞান কহে তবে কেন না মান ॥

The above song with different readings has been attributed to Vidyapati in the Vaisnavapadalahari. The pada is quoted below :—

আজি কেনে তোমায় এমন দেখি ।
 সযনে ঢুলিছে অরুণ আঁখি ॥
 অঙ্গ মোড়া দিয়া কহিছ কথা ।
 না জানি অন্তরে কি ভেল ব্যথা ॥

সন্নে গগনে গনিছ তারা ।
 দৈব আঘাত হৈয়াছে পাঁরা ॥
 যদি না কহ লোকের লাজে ।
 মরমী জনার মরমে বাজে ॥
 আঁচলে কাঞ্চন ঝলকে দেখি ।
 প্রেম কলেবর দিয়াছে সাধি ॥
 বিজাপতি কহ একথা দড় ।
 গোপন পিরীতি বিষম বড় ॥

This very song again has been attributed to Chandidas in the earliest published version of his poems compiled and edited by that pioneer in the field, the late Babu Jagat Bandhu Bhadra who did considerable spade work in this direction.

(2) The following song has been found in the Sahitya-Parishad Manuscript No. 201. It remains still unpublished in any of the printed editions of Jnanadas and in any of the anthologies of Vaisnava poems, such as, the Padakalpataru, the Padamṛtasamudra, the Gaurapadatarangini, the Padakalpalatika, the Vaisnavapadalahari, etc. The pada is quoted below :—

সহজই আনন হৃদয় রে
 ভাঙ হুঁরেখলি আঁধি ।
 পঙ্কজ মধুকর পিবু মধু বনেরে
 উভয়ে পসারল পাখী ॥
 অতয়ে ধাওল মেরি লোচন রে
 জাহি জাহি গেল বরনারী ।
 আসা লুবধ না তেজই রে
 কুপনক পাছে ভিথারি ॥
 অতয়ে রহল মন মোর রে
 কনক কুচ গিরি সাধি ।
 তে অপরাধে মনোভব রে
 কাপি রহল মন বাধি ॥

ফুল কবরি উরহি লোটায়ল রে
কোরে ধয়ল তুয়া ভানে ।
জানদাস কহ তুহু ভালে সমুঝহ
কোন কবর পরমানৈ ॥

(3) The following pada is found in the Sahitya-Parishad Manuscript No. 201 :—

কি পেখলু তরমুলে ধন্দ ।
এক বরণের কালা, বিবিধ বিনোদ লীলা,
লাবণ্য বরয়ে মকরন্দ ॥
ভবজ অনুজ রথতলে বিনতা স্তুত কোরে
কুমুদবন্ধু সাজে ।
হরি অরি সন্নিধানে অলিরথে পুরে বান
রমণি মণির মন মাঝে ॥
খগেন্দ্র নিকটে বসি রসেন্দ্র বাজায় বাঁশী
যোগেন্দ্র মণিলু মুরছায় ।
কুস্তির নন্দন মূলে কস্তপনন্দন দোলে
মনমথ মথ তায় ॥
জলধি স্নাতাপতি তার শিরে বার স্থিতি
সে পুণ যমুনাজলে ভাসে ।
শচিপতি রিপু স্তুতা বাহন বিজুরি লতা
নিরীক্ষণ করে জানদাসে ॥

The above song with different readings is to be found in the Vaisnavapadalahari, page 204 :—

সখিছে কি পেখলু নীপ মূলে ।
একে সে বরণ কালা বিবিধ বিনোদ মালা
লাবণ্য বুরয়ে মকরন্দ ॥
ভবজ অনুজ রথ তা তলে বিনতা স্তুত
কোরে কুমুদবন্ধু সাজে ।
হরি অরি সন্নিধানে অলি রস পূরে বাণে
রমণী মূনির মন বাঞ্চে ॥

খগেন্দ্র নিকটে বসি রসেন্দ্র বাজায় বাঁশী
 ষোগীন্দ্র যুগীন্দ্র মুরছায় ।
 কুস্তির নন্দন মূলে কণ্ঠপনন্দন দোলে,
 মামথ মনমথ তায় ॥
 জলধি স্নাতাপতি তা তলে বাহার স্থিতি
 সে কেন যমুনার জলে ভাসে ।
 শচীপতি-রিপুসুতা বাহন বিছুরী লতা,
 রূপ নিরখয়ে জ্ঞানদাসে ॥

(4) The following song is found in the Parishad Manuscript No. 2416 with the name of Jnanadas in the colophon, while in the Vaisnavapadalahari, p. 153, the same song has been attributed to Chandidas. The two songs differ in their readings.

Thus the song in the Manuscript referred to above, begins with the lines :—

সখি এ কথা জানয়ে কে ।
 পিরিতি বলিয়া বাহার অন্তরে কিছু বা বুঝয়ে সে ॥

While in the song found in the Vaisnavapadalahari the lines are :—

মনের মরম জানিবে কে ।
 সেই সে জানে মনের মরম এ রসে মজিল যে ॥

The third and the fourth lines of the song in the Manuscript are :—

চোরের মা যেন পোয়ের লাগিয়া
 অন্তরে কাঁদিয়া মরে ।
 কুলবতী হঞা পিরিতি করএ
 তেমতি সঙ্কট তারে ॥

In the place of the above we get the following lines in the Vaisnavapadalahari :—

চোরের মা যেন পোয়ের লাগিঞা
 ফুকরি কান্দিতে নারে ।
 কুলবতী হঞা পিরিতি করিলে
 এমতি সঙ্কট তারে ॥

The concluding lines of the song in the Manuscript are :—

জ্ঞানদাস কএ স্নন বিনোদিনী
মনে না ভাবিহ আন ।
তুমি সে শ্রামের সরবস ধন
সে শ্রাম তোমারি প্রাণ ॥

While the concluding lines of the song in the Vaisnavapadalahari are :—

পর কি জানয়ে পরের বেদন
সে রত আপন কাজে ।
চণ্ডীদাস কহে বনের ভিতরে
কভু কি রোদন সাজে ॥

(5) The following song is found in the Sahitya-Parishad Manuscript No. 2416. The same song appears in the Vaisnavapadalahari, p. 207, with some variations in the reading. The difference is shown below :—

Parishad Ms. No. 2416 :—সই বড় বিনোদিয়া নাগর কান ।

Padalahari :— ও বড় বিনোদিয়া কান ।

Parishad Ms. No. 2416 :—কুঞ্চিত অলক উপরে মণিকুণ্ডল
মল্লিকা মালতি মালে ।
চুড়া চিকণ চারুশিখিচন্দ্রক
টালনি আধ কপালে ॥

Padalahari :— কুঞ্চিত অলকা উপরে অলি মণ্ডল
কাম কামান ভুরু ভঙ্গী ।
মলয়জ তিলক ভালে অতি বিলিখন
যা দেখি চাঁদ কলঙ্কী ॥

Parishad Ms. No. 2416 :—পীত বদন মণিময় ভূষণ
উরে দোলই বনমাল ।

জ্ঞানদাস কহে অপকৃপ দেখহ
বিজুরি তরুণ তমাল ॥

The 3rd and 4th lines of the song in the MS. No. 2416 are :—

সে হেন কালিয়া এমন হইল
কিপের লাগিয়া জান ।
দরস লাগিয়া যে জনা বেড়াথ্য
সে এত নিঠুর কেন ॥

While in the song of Chandidas the lines are :—

সে হেন কালিয়া নিঠুর হইল
কি শেল লাগিয়া যেন ।
দরশন আশে যে জন ফিরয়ে
সে এত নিঠুর কেন ॥

The 5th and 6th lines of the song in the MS. are :—

কি বুদ্ধি করিব বলনা গো সহ
ভাবনা বিষম হইল ।
হিয়া দকদকি পরাণ পুতলী
কেমনে হইব ভাল ॥

While in the song found in Nilratan Babu's edition of Chandidas the lines are :—

বলনা কি বুদ্ধি করিব এখন
ভাবনা বিষম হৈল ।
হিয়া দগদগি পরাণ পোড়ানি
কি দিলে হইবে ভাল ॥

The concluding two lines of the song in the MS. are :—

জ্ঞানদাস কহে সুন বিনোদিনি
মনে না ভাবিহ আন ।
তুমি সে কালিয়ার সরবস ধন
সে কালা তোমার প্রাণ ॥

The concluding 2 lines of the song in Nilratan Babu's edition are :—

চণ্ডীদাস কহে সুন বিনোদিনি
মনে না ভাবিহ আন ।

তুমি সে শ্রামের সরবস ধন
শ্রাম সে তোমার প্রাণ ॥

In the song found in the MS. No. 2416 we get :—

জ্ঞানদাস কএ শুন বিনোদিনি
মনে না ভাবিহ আন ।

তুমি সে শ্রামের সরবস ধন
সে শ্রাম তোমারি প্রাণ ॥

(8) The song beginning with the line “পিয়া পরদেশে বেশ গেল দূর” is found in the MS. No. 331 C. U. The same song is incorporated in the Battala edition of the Padakalpataru. The two songs differ much in readings :—

MS. No. 331 :— পিয়া পরদেশে বেশ গেল দূর ।
হাস রভস সবহ ভেল চুর ॥

Padakalpataru :— হরি পরদেশে বেশ গেল দূর ।
হাস পরিহাস সবহ গেল চুর ॥

Padakalpataru :— এ সখি সখি হুর দিন লাগি ।

MS. No. 331 :— এ সখি সখি কুদিবস লাগি ।

Padakalpataru :— হাত রতন খসে কোন অভাগী ।

MS. No. 331 :— হাত রতন খসে কেমন অভাগী ।

Padakalpataru :— রতন হার ভেল গুরুতর ভার ।

MS. No. 331 :— রতনক হার গুরুআ ভেল আর ॥

Padakalpataru :— মনমথ শিশুন কয়ল জীউ অন্ত ।

MS. No. 331 :— মনমথ শিশুন কয়ল জীউ অন্ত ।

(9) The song beginning with “কি ছার মানের লাগিয়া আমার পরাণ বন্ধুরে হারিয়াছিলাম” is found in the University MS. No. 341 with Jnanadas's name in the colophon. But the same song with different readings can be found in the Vaisnavapadalahari and Nilratan Babu's edition of Chandidas with Chandidas's name in the colophon. Let us note the difference in readings :—

The starting lines of the song in the manuscript are :—

“কি ছার মানের লাগিয়া আমার
পরাণ বন্ধুরে হারিয়াছিলাম ।

শ্রীমন্ত্দের রূপ মনোহর

দেখিয়া পরাণ পালান ॥”

While in the Padalahari the readings of the lines are :—

হি ছি দারুণ মানের লাগিয়া

বধুরে হারাইয়াছিলাম ।

শ্রীমন্ত্দের রূপ মনোহর

দেখিয়া পরাণ পেলাম ॥

MS. No. 341 :— স্নন সখিগণ করহ সিনান

আনি যমুনার নীরে ।

আমার বন্ধুর যত অমঙ্গল

সকল ষাউক দূরে ॥

Padalahari :— তোরা সখিগণ করহ সিনান

আনিয়া যমুনা নীরে ।

আমার বন্ধুর যত অমঙ্গল

সকল ষাউক দূরে ॥

MS. No. 341 :— এ মধু মঙ্গলে তুরিতে আনিঞা

ভুঞ্জাও সখি দধি ।

জ্ঞানদাস কহে স্নন স্নন রাই

তোমাতে সদয় বিধি ॥

Padalahari :— এ মধু মঙ্গলে আনহ সকলে

ভুঞ্জাহ পায়স দধি ।

বধুর কল্যানে দেহ নানা দানে

আমাতে সদয় বিধি ॥

(10) The song beginning with “আরে মোর বন্ধুরে কানাই” has been found in the MS. No. 342. The same song with different readings can be found in the Padalahari.

Thus :—

MS. No. 342 :— আরে মোর বন্ধুরে কানাই ।

তোমা বিনি তিলেক রহিতে ঠাই নাই ।

- Padalahari :— আন্ত মোর আন্ত মোর
বন্ধু কানাঞী
তোমা বিনে তিলেক জুড়াতে নাঞি চাই ॥
- Padalahari :— এ ঘর বসতি মোর অনলের খনি ।
তোমার পিরীতি লাগি রাখিয়াছি পরাণী ॥
- MS. No. 342 :— এ ঘর করণ মোর আঙনের খনি ।
তোমার দরশ লাগি রাখাছি পরাণি ॥
- Padalahari :— তুমি যদি না ছাড় বন্ধু হুখে মোর স্তথ ।
জানদাস কহে তিলে লাখ যুগ ॥
- MS. No. 342 :— তুমি যদি কর দয়া হুখে মোর স্তথ ।
জানদাসেতে কয় তিলে লাখ যুগ ॥

(11) The following four lines are to be found in the song in the Manuscript, but they are absent from the song in the Padalahari :—

সোত পাথার জলে তিন হেন ভাসি ।
উচিত কহিতে নাই এ পাঠ পড়সি ॥
ঘরে গুরু গজনাতে বত হুখ পাই ।
কুটিল কুন্তল বন দেখিলে জুড়াই ॥

(12) The song beginning with the line “বঁধুহে আর কি ছাড়িয়া দিব” has been found in the University Manuscript No. 342. The same song has been noticed in the Vaisnavapadalahari and in the Padaratnavali. The songs differ so much in readings that the variations should be noted in detail.

- MS. No. 342 :— বঁধুহে আর কি ছাড়িয়া দিব ।
- Padalahari :— বন্ধু আর না ছাড়িয়া দিব ॥
- Padaratnavali :— বন্ধু আর কি ছাড়িয়া দিব ।
- Padalahari :— এ বুক চিরিয়া যেখানে পরাণ ।
সেখানে তোমারে খোব ॥
- MS. No. 342 :— হিরার ভিতরে যেখানে পরাণ ।
সেখানে লুকায়া খোব ॥
- Padaratnavali :— হিরার মাঝারে যেখানে পরাণ
সেখানে রাখিয়া খোব ।

- MS. No. 342 :— সো চাঁদ বদন সদা নিরখিব
শোক না করিব আর ।
- Padaratnavali :— Absent from the song.
- MS. No. 342 :— তোমা হেন নিধি পুন দিল বিধি,
পুরল মনের সাধ ॥
- Padalahari :— তোমা হেন নিধি মিলাওল বিধি
পুরিল মনের সাধ ॥
- MS. No. 342 :— মন ভোর দিয়া রাখিব বাক্সিয়া
ছথানি চরণারবিন্দ ।
- Padalahari :— প্রেম ভোর দিয়া রাখিব বাক্সিয়া
ছথানি চরণারবিন্দ ।
- Padaratnavali :— নহে তান হের নিগঢ় করিয়া
রাখিব চরণারবিন্দ ।
- MS. No. 342 :— কেবা নিতে পারে নেউক আসিয়া
পাঁজরে কাটিয়া সিদ্ধ ।
- Padalahari :— কেবা নিতে পারে কাহার শক্তি
পাঁজরে কাটিয়া সিদ্ধ ॥
- Padaratnavali :— কেবা নিতে পারে নেউক আসিয়া
পাঁজরে কাটিয়া সিদ্ধ ॥
- MS. No. 342 :— হিমার বাহিরে আর না করিব
রাখিতে নাহিক ঠাঞি ।
- Padalahari :— হিমার মাঝারে সাধ যে করি
রাখিতে নাহিক ঠাঞি ।
- MS. No. 342 :— হারাইল বলি অলপ পরাণি
চাহিয়া পাইতে নাঞি ॥
- Padalahari :— অবলাপরাণে হারাও হারাও বাসি
খুঁজিয়া পাইতে নাই ॥
- MS. No. 342 :— সদাই রাখিব কোলে ।
- Padalahari :— রাখিতে নারিলাঞ কোলে ।

Curiously enough the starting lines of the above song are almost similar to those of a different song of which Chandidas is the author.

The starting lines of the song by Chandidas are :—

বঁধু ছাড়িয়া না দিব তোরে ।
 মরম বেখানে রাখিব সেখানে
 হেন মৌর মনে করে ॥

The starting lines of the song by Jnanadas are :—

বঁধু আর না ছাড়িয়া দিব ।
 হিয়ার মাঝারে বেখানে পরাগ
 সেখানে তোমারে থোব ॥

(13) The following song beginning with the line “আনত যে মাধব আনত যে রাই” is found in the Parishad Manuscript No. 201 and in the Parishad MS. No. 977. This song has not yet been published in any of the editions of Jnanadas, nor can it be found in any of the published editions of the Vaisnava poets.

There is much difference in readings between the song in the MS. No. 977 and the song in the MS. No. 201.

Parishad MS. No. 201 :—আনত যে মাধব আনত যে রাই ।

- | | | |
|---|---|-----------------------------------|
| “ | “ | 977 :—আনত হিঁ মাধব আনত হিঁ রাই । |
| “ | “ | 201 :—ধনি মুখ বন্ধিম ওর না পাই ॥ |
| “ | “ | 977 :—ধনি মুখ বন্ধিম উতর না যাই ॥ |
| “ | “ | 201 :—ঐছন সময়ে হাম মন্দিরে গেল । |
| “ | “ | 977 :—ঐছন সমএঁ মন্দিরে গেল । |
| “ | “ | 201 :—হিয়ে জেন বাজল নিরদয় সেল ॥ |
| “ | “ | 977 :—বাজল ঐছনে নিরদয় শেল ॥ |
| “ | “ | 201 :—শুন শুন রে সখি কানুক চরিত । |
| “ | “ | 977 :—শুনহ সজনি কানুক রীত । |
| “ | “ | 201 :—সুনি অবতে নব ঐছন পিরিত ॥ |
| “ | “ | 977 :—বিধি অব হেরল ঐছন পিরিত ॥ |

Parishad MS. No. 201 :—পিয়া অম্বোংল বৈছন আছ।

„ „ 977 :—পিয়া পরবোধল বৈছন আশ।

„ „ 201 :—কর যোরে হাসি বিনয় জব কান।

„ „ 977 :—কর জোড়ি হাসি সব করলি হুঁ কাল।

„ „ 201 :—রোধল মনমথ তব দিন আনি।

„ „ 977 :—রোধলি মনমথ তব দিন আনী।

„ „ 201 :—জ্ঞানদাস কহ বুঝহ সজনি ॥

„ „ 977 :—জ্ঞানদাস কহ শুনহ সজনি ॥

The following two lines are to be found in the Manuscript No. 201, which we miss in the MS. No. 977 :—

“হুঁ মন জানি সোপলু হুঁ তাথে।

হুঁরদিন কীষে ভেল পরভাতে ॥”

(14) The song beginning with the line “তিলেকে তেয়াগিহু পতি খুঁ ধার” has been found in the University Manuscript No. 331. It is found also in the Aprakashita Padaratnavali, published by the Sahitya Parishad. But the readings are different.

Thus :—

Aprakashita Padaratnavali :—রসের আবেশে দীপ

নিভাইল সাঁঝ বেলে।

University MS. No. 331 :— রতি রস আশে দীপ

নিভাইল সাঁঝ বেলে।

Aprakashita Padaratnavali :—কলঙ্ক রহিল মোর

গোকুল নগরে।

University MS. No. 331 :— কলঙ্ক রহিল সবে

গোকুল নগরে।

Aprakashita Padaratnavali :—যে লোকের লাগি কৈলু

কুলের বঞ্চনা।

University MS. No. 331 :— যে লোকের লাগিয়া কৈলু

কুলের লাঞ্ছনা।

Aprakashita Padaratnavali :—জ্ঞানদাস কহে ইথে কেমন উপায়।

জুখ পরাভব জুখ সহনে না যায় ॥

University MS. No. 331 :— জ্ঞানদাস কহে ইথে কমন উপায় ।
 প্রেম পরাভব হুখ সহন না জায় ॥

Different readings—

Padakalpataru :— বা হেরিছ স্বপনে
 আন নাহি হেরিয়ে ।

MS. No. 331 :— বা বিহু স্বপনে
 আন নাহি জানিয়ে ।

Padakalpataru :— অব মোহ বিছুরল সোই ।

MS. No. 331 :— অব মোহে বিছুরল সোই ।

(15) The song beginning with the line “মনের মরম কথা গুনলো সজনি” has been found in the MS. No. 331. It can be found also in the Padakalpatru (Battala edition) as well as in the Satis Ray’s edition of Padakalpataru.

The difference in readings is given below :—

Battala edition :— কিবা রূপ কিবা গুণ মন মোর বান্ধে ।

Satis Babu’s edition :— কিবা সে মোহন রূপ মন মোর বান্ধে ।

MS. No. 331 :— কিবা রূপে কিবা গুণে মন মোর বান্ধে ।

Battala edition :— মুখে না নিঃসরে বাণী
 ছটি আঁখি কান্দে ।

Satis Babu’s edition :— মুখেতে না সরে বাণী
 ছটি আঁখি কান্দে ।

MS. No. 331 :— মুখেতে না সরে বোল
 ছটি আঁখি কান্দে ।

MS. No. 331 :— মনের মরম কথা গুনলো সজনি ।
 গ্রাম নাগর পড়ে মনে দিবস রজনী ॥

Satis Babu’s edition :— মনের মরম কথা গুন লো সজনি ।
 গ্রাম বন্ধু পড়ে মনে দিবস রজনী ॥

(16) The song beginning with the line “রূপ লাগি আঁখি বুঝে”..... has been found in the MS. No. 331 with readings differing much from those of the same song found in the Padakalpataru.

Padakalpataru :— সোই কি আর বলিব ।

MS. No. 331 :— সজনি কি আর বলিব ॥

Padakalpataru :—	যে পুনি করিয়াছি মনে সেই সে করিব।
MS. No. 331 :—	যে পণ আছে মনে সেই সে করিব।
Padakalpataru :—	লহ লহ হাসে পহ পিরিতির সার।
MS. No. 331 :—	লহ লহ কহে কথা অম্মির সার।
Padakalpataru :—	দরশ পরশ লাগি আউলাইছে গা।
MS. No. 331 :—	সরস পরশ লাগি আউলাইছে গা।

The following two lines are to be found in the song of the Manuscript, but they do not occur in the song in the Padakalpataru.

গুরুর গঞ্জে আমি নিচরে মরিব।

এই সে রহল শেল কাহ্ন না দেখিব ॥

17. The song beginning with the line “বড়ই বিষম কালার প্রেম মোর এ বর বসতি লাগে শলি,” is included in the Padāmṛta Samudra. The same song with different readings is found in the Manuscript No. 331 and the Padakalpataru. The difference in readings may be shown thus :—

Padāmṛtasamudra :—	বড়ই বিষম কালার প্রেম মোর এ বর বসতি লাগে শলি।
Padakalpataru :—	বড়ই বিষম হৈল কালার প্রেম এ বর বসতি লাগে শলি।
MS. No. 331 :—	বড়ি বিষম কালার প্রেম মোর এ বর বসতি লাগে শলি।
Padāmṛtasamudra :—	যত যত পিরিতি করয়ে মোরে।
MS. No. 331 :—	যত যত পিরিতি করিয়াছে মোরে।
Padāmṛtasamudra :—	আখরে লিখিয়াছে মোর হিয়ার ভিতরে ॥
MS. No. 331 :—	আখরে লিখ্যাছে সব হিয়ার ভিতরে ॥
Padakalpataru :—	আখরে আখরে লেখা হিয়ার ভিতরে ॥

18. We have in the Sāhitya Parishad MS. No. 201 a song (attributed to Jnanadas) beginning with the line, “শুন মাধব রাধা বোধ না ভেল।” The same song with a slight difference in reading is found in the Vaisnavapadalahari (an anthology of Vaisnava songs published from the Bangabasi office). But the most interesting thing is, that

the same song has been found twice in the MS. No. 201 (Sahitya Parishad), and these two songs (song No. 71 and song No. 75) differ much in their readings.

Thus song No. 75 (MS. No 201) begins with the line “না বুঝিয়ে অন্তর কোপ নিরন্তর।” While song No 71 (MS. No 201) begins with the line “গুন মাধব রাধা বোধ না ভেল,” which is the 5th line of song No 75.

Then again, the first four lines of song No. 75.

“না বুঝিয়ে অন্তর কোপ নিরন্তর
বচন না সঞ্চরে বয়ানে।
সহজেই কমলিনী ভেল মলিন অতি
ধারা বহে শতশত নয়নে ॥”

are totally absent from song No. 71.

The same song as found in the Vaisnavapadalahari begins with the line “না বুঝিয়ে অন্তর কোপ নিরন্তর” as is the case with song No 75.

Now let us detect the difference in the readings of the various versions.

না বুঝিয়ে অন্তর কোপ নিরন্তর।

—Parishad MS. No. 201.

না বুঝলু অন্তর কোপ নিরন্তর।

—Padalahari, p. 246.

ধারা ধর শত নয়নে।—Parishad MS. No. 201.

ধারা শত শত নয়নে।—Padalahari, p. 246.

মাধব রাধা পরবোধ না ভেল।—Parishad MS. No. 201,
Song No. 75.

গুন মাধব রাধা বোধ না ভেল।—Parishad MS. No. 201,
Song No. 71.

মাধব রাধা বোধি না ভেল।—Padalahari, p. 246.

কতএ বিচারি চরণে ধরি বোললো

তবহ উত্তর না দেল —Parishad MS. No.
201, Song No. 75.

কত সমুঝাই চরণ ধরি সাধল

তবহ উত্তর নাহি দেল ।—Parishad MS No.
201, Song No. 71.

কত সমুঝাই চরণ ধরি বোললু

তবহ উত্তর নাহি দেল —Padalahari, p. 246.

সঘন উদাস

কুন্তল আকুল

পুণ পুণ গৌরী ।

—Parishad MS. No. 201, Song No. 75.

সঘন নিশাস

উদসল কুন্তল

আকুল অতিশয় গৌরী ।

—Parishad MS. No. 201, Song No. 71.

কনক রঙ্গের

নিয়ড়ে জহ্ন মরকত

ঐছন ভেল কত বেরি ।

—Parishad MS. No. 201, Song No. 75.

কোপে কমল মুখী

ধরহরি কাঁপয়ি

রহলি বিরাগে অঙ্গ যোড়ি ।

—Parishad MS. No. 201, Song No. 71.

কনক মুকুর

নিয়ড়ে জহ্ন মরকত

ঐছন ভেল কত বেরি ।

—Padalahari, p. 246.

এক করে মুঠি বান্ধি

মুখ মদন মোহে

কয়ল পরণাম ।

—Parishad MS. No. 201, Song No. 71.

এক কর মুঠে

মুখ মদল

মোহে কয়ল পরণাম ।

—Parishad MS. No. 201, Song No. 75.

এক করে মুঠি বান্ধি

মুখ মদল মোহে

কয়ল পরণাম ।

—Padalahari, p. 246.

জ্ঞানদাস কহ মনহি বিচারহ
নিরস না ভেল পরিণাম ॥

—Parishad MS. No. 201, Song No. 75.

জ্ঞানদাস কহ চিতে অল্পমানিয়ে
নিরস ভেল পরাণ ॥

—Parishad MS. No. 201, Song No. 71.

জ্ঞানদাস কহ তুহু ভালে সমুঝহ
নিরস না ভেল বয়ানে ॥

—Padalahari, p. 246.

(9) The song beginning with the line “অনুন্নয় করইতে অবগতি না কর না বুঝিয়ে অন্তর তোর” is found in the Sahitya Parishad Manuscript No. 201. The reading of the Padakalpataru version does not agree with the above.

অনুন্নয় করইতে অবগতি না কর
না বুঝিয়ে অন্তর তোর ।

—Padakalpataru.

অনুন্নয় বোলইতে অবগতি না কর
না বুঝিয়ে অন্তর তোরি ।

—Parishad MS. No. 201.

মানিনি অব কি করব ছর দিনে । —Padakalpataru,
মানিনি অব কি কহব ছর দিনে । MS. No. 201.

অনুগত জানি গারি পসারয়ে
বিপদে বুঝিয়ে উপকার ।

তব হাম জনম সফল করি মানিয়ে
জগতে রহয়ে যশোভার ॥

—Padakalpataru.

অনুগত জানি পাণি পসারয়ে
বিপদে বুঝিয়ে উপকার ।

তাকর জনম সফল করি মানিয়ে
জগতে রহয়ে যশ ভার ॥

—Parishad MS. No. 201.

জ্ঞানদাস কহ নিজ জন জানিয়া
অভয়ে করয়ে সমাধানে ।—Padakalpataru.

জ্ঞানদাস কহ নিজ জন জানিঞে
কাল্লক রাখহ পরাণে ।—Parishad MS. No. 201.

জ্ঞানদাস কহ নিজ জন জানিয়া
অতএ করবি সমাধানে ॥—Padalahari, p. 249.

অবনত বয়নী না কহে কিছু বাণী ।

—Parishad MS. No 201.

অবনত বয়নে না কহে কিছু বাণী ।—Padakalpataru.

পরশিতে তরসি ঠেলয়ে পছ পানি ।—Parishad MS. No 201.

পরশিতে বিহসি ঠেলয়ে পছ পানি ।—Padalahari.

হুচতুর নায়ক করয়ে অহুরোধ

অভিমাত্রী রাই না মানয়ে বোধ—Parishad MS. No 201.

হুচতুর নাহ করয়ে অহুরোধ ।

অভিনব নায়কী না মানয়ে বোধ ॥—Padalahari.

পিরীতি বচন কিছু কহল বিশেষ ।

রাইক হৃদয়ে দেখল নব লেশ ॥—Parishad MS. No 201.

পিরীতি বচন গুন কহল বিশেষ ।

রাইক হৃদয়ে দেখয়ে নব লেশ ॥—Padakalpataru.

রস পরসঙ্গে করয়ে বহু রঙ্গ ।—Parishad MS. No 201.

রস পরসঙ্গে কয়ল কত রঙ্গ ।—Padakalpataru.

নিজ পরধাবে নামে দেই ভঙ্গ ।—Parishad MS. No. 201.

নিজ পরধাব নামে দেহ ভঙ্গ ।—Padakalpataru.

আরভল নাহ

না বসে ধনী পাশে ।

হাহা মনমথ

পড়লহি হাসে ॥—These lines are absent from
the song in the Padakalpa-
taru.

(20) The song beginning with the line “শ্রাম অভিসারে চলু বিনোদিনী রাধা” is found in the Sabitya Parishad Manuscript No. 201. This song differs much in readings from the same song found in the Padakalpataru and the Vaisnavapadalahari.

শ্রাম সন্তাসিতে চলিলা

বিনোদিনী রাধা—Padalahari.

শ্রাম অভিসারে চলু

বিনোদিনী রাধা—Parishad MS. No. 201.

অকুঞ্চিত কেশ রাই বনায়া কবরী।—MS. No. 201.

অকুঞ্চিত কেশ রাই বাঙ্কিয়া কবরী।—Padalahari.

ভালারে মালতী মালা

গুঞ্জরে ভ্রমরী ॥—Padalahari.

কুস্তলে বকুল মালা

গুঞ্জরে ভ্রমরী ॥—MS. No. 201.

বাম নাসার আগে রাইর

মুকুতা হিলোল ॥—MS. No. 201.

নাশার বেশর দোলে

মারুত হিলোল ॥—Padalahari.

কুরঙ্গ নয়নে রাধার

কাজরের রেখা।

চান্দে ঢাকল মেঘ

আধ দিছে দেখা ॥—MS. No. 201.

ভালারে সিন্দুর বিন্দু

চন্দনের রেখা।

জলদে ঝাঁপল চাঁদ

আধ দিছে দেখা ॥—Padalahari.

শ্রাম বামে বৈঠল

রসের মঞ্জরী।

জ্ঞানদাস মাগে দৌহার

চরণ মাধুরী ॥—Parishad MS. No. 201.

আম কোরে মিলল

রসের মঞ্জরী ।

জ্ঞানদাস মাগে রাজা

চরণ মাধুরী ॥—Padalahari.

(21) In the Sahitya Parishad MS. No. 201 the song beginning with the line “কনক বয়ান কনক কঁাতি” has been found, differing much in readings from the same song found in the Calcutta University Manuscript No. 336.

চলল হরিণী নয়নী রাই ।—MS. No. 336.

চাহলি হরিণী নয়নী রাই ।—MS. No. 201.

চললি হরিণ নয়নী রাই ।—Padalahari.

হিয়ার মাঝারে কনক ছুরি ।—MS. No. 336.

হিয়ার মাঝারে মাণিক ছিরি ।—MS. No. 201.

হিয়ার মাঝারে কনক ছুরি ।—Padalahari.

দামিনী বেচল চন্দ্র নিমলি ।—MS. No. 336.

দামিনী বেচল চান্দিনি বেলি ।—MS. No. 201.

দামিনী বেচল চাঁদনি বেলি ।—Padalahari.

বিজয় সারি সময় সাজ ।

রবি দিনায়ত তটিনী মাঝ ॥—MS. No. 201.

বিজয় সারিম সময় সাজ ।

রবি শিলা যত তটিনী মাঝ ॥—Padalahari.

নাতি হৃদয় করু পয়ান ।—MS. No. 201.

নাতি সরোরুহে করু পয়ান ।—Padalahari.

কেশরী সোসরি মাঝারি অঙ্গ ।

ত্রিভলি যৌবন জল তরঙ্গ ॥—MS. No. 336.

(22) The song beginning with “পিয়র পিরীতে জাগি ঘুমাইলু না জানি আপন পর” is found in the Sāhitya Parishad MS. No. 201 with readings different from those of the song in the Vaisnavapadalahari.

পিয়র পিরীতে জাগি ঘুমাইলু

না জানি বিহান নিশি ।—Padalahari.

পিরীতি পিয়াসে জাগি ঘুমাইলু
না জানি বিহান নিশি ।

—University MS. No. 201.

কাহুর সঙ্গের অঙ্গের দৌরভ
ননদী পাওল আসি ।—Vaisnavapadalahari.

কাহুর সঙ্গের অঙ্গের বদন
ননদী হেরল আসি ।

—University MS. No. 201.

আপাদ মন্তক নাহি পরকাশ
কে দিলে চন্দন চুয়া ।

—University MS. No. 201.

আপাদ মন্তক নাহি অবসর
কে দিলে চন্দন চুয়া ।—Padalahari.

স্বরঙ্গ অধরে রঙ্গ ধরাইছে
কে দিলে এমন গুয়া ।

—University MS. No. 201.

কে দিলে হের রঙ্গের সুপুর
কে দিলে এমন হার ।—Padalahari.

কে দিলে চরণে এ হেন সুপুর
কে দিলে এমন হার ।

—University MS. No. 201.

নাসার বেশর ভালে সে তিলক
কে দিল এমন ছান্দে ।—Padalahari.

(23) There is a song in the MS. No. 2381 (Calcutta University) beginning with the line “মন্দিরে বসি চন্দিকা সাজসি তারার গতিসি হার ।” This song is to be found in none of the published editions of Jnanadas, nor in any of the anthologies of Vaisnava songs. Recently, however, this song has been found in the Padāmṛtasindhu, a manuscript in the possession of Dr. Dineshchandra Sen. The song in the Padāmṛtasindhu, and the song in the manuscript No. 2381 (C. U.) differ much in their readings.

Thus the first line of the song in the manuscript No. 2381 is :—

মন্দিরে বসসি চন্দিকা সাঅসি
তারার গতিসি হার ।

While the song in the Padāmṛtasindhu opens with the line :—

মন্দিরে বসসি চাঁদ ফাঁদাওসি
তারার গাঁথসি হার ।

The second line of the song in the MS. No. 2381 is :—

বনে জল নিধি আঙ্গুলে মথসি
গনিস পানির ধার ॥

While the second line of the song in the Padāmṛtasindhu is :—

বসে জল নিধি আঙ্গুলে মথসি
গনিস পানিক ধার ॥

The third line of the MS. No. 2381 is :—

রসবতি এ বড় চাতুরি তোর ।
যে রস উপজল নিয়ড় ভেগল
কিছুই না পাল্য ওর ॥

While the third line of the song in the Padāmṛtasindhu is :—

ধনি, এ বড় সাহস তোর ।
গগন মণ্ডলে শেজ বিছাওসি
চাঁদে রে মাগসি কোর ॥

জ্বমের শিখরে গরবে গিলসি
কাটিয়া থাপসি নীর । —MS. No. 2381.

কুলীশ থসসি দশনে ধরসি
কাটিয়া থাপসি নীর । —Padāmṛtasindhu.

আলপ বয়সে এ সব চাতুরি
জগতে বোলাঅসি ধীর ॥ —MS. No. 2381.

আলপ বয়সে এ বড় চাতুরী
জগতে বোলসি ধীর ॥ —Padāmṛtasindhu.

আঁচলের বায়	অচল চালসি
সাগর গাঙ্গে খায় ।—MS. No. 2381.	
আঁচলের গায়	চালসি বায়
সমুদ্র গাঙ্গে খায় ।—Padāmṛtasindhu.	
কঙ্কাল বদনী	কাল ভুজঙ্গিনী
জীয়ন্ত ধরিতে চায় ॥—MS. No. 2381.	
কোন কুবুধিনী	কাল ভুজঙ্গিনী
জীয়ন্ত ধরিতে চায় ॥—Padāmṛtasindhu.	
জ্ঞানদাস কহে	শুন বিনোদিনী
কাহ্ন সে ভুখিল শশি ।—MS. No. 2381.	
জ্ঞানদাস কহে	কাহ্ন সে রাহ
রাই সে নবীন শশি ।—Padāmṛtasindhu.	
ভক্ষ সামগ্রি	একত্রে করিয়া
চমকি রহল বসি ॥—MS. No. 2381.	
ভক্ষ সামগ্রি	একত্রে করিয়া
ঠমকে আছহ বসি ॥—Padāmṛtasindhu.	

(24). The song beginning with the line “হাসি হাসি মোর মুখ নিরখিয়া মনে মনে কথা কয়,” is found in the manuscript No. 201 (Sāhitya-Parishad) with readings different from those of the song in the Padakalpataru and other published anthologies.

হাসি হাসি মোর মুখ নিরখিয়া
মনে মনে কথা কয় ।—MS. No. 201.

হাসিয়া হাসিয়া মুখ নিরখিয়া
মধুর কথাটি কয় ।—Padalahari.

সই, সে জন মানুষ নয় ।—MS. No. 201.

আলো সই, সে জন মানুষ নয় ।—Padalahari.

তাহার সনে পিরীতি করিলে
না জানি কি জানি হয় ।—Padalahari.

তাহার সঙ্গিতে পিরীতি করিয়ে
কি জানি কি তার হয় ।—Padāmṛtasindhu.

সইরে, রসের আকর কতক ভাবের উদয় হয়।—MS.

No. 201.

সহজে রসের আকর সে যে,

ভাবের অঙ্কুর তায়।—Padalahari.

সহজে রসের অঙ্কুর সে যে

ভাবের অঙ্কুর তায়।—Padāmṛtasindhu.

বাতাসে বসন উড়িতে আপন

অঙ্গে ঠেকাইয়া যায় ॥—MS. No. 201.

বাতাসে বসন উড়িতে আপন

অঙ্গেতে ঠেকাইয়া যায় ॥—Padalahari.

ও গীম দোলনি ঠামক চলনী

রমনী মানস চোর।—MS. No. 201.

চমক চলনী ও গীম দোলনী

রমনী মানস চোর।—Padalahari.

জ্ঞানদাস বোলে ভালই বুঝিলে

মরমে লাগল মোর ॥—MS. No. 201.

জ্ঞানদাস কহে সো পিয়া পিরীতি

মরমে পশিল তোর ॥—Padalahari.

(25). There is a song in the Sāhitya-Parishad MS. No. 2041, beginning with the line, “আমার অঙ্গের বরণ লাগিয়া পীতবাস পরে শ্রাম,” which constitutes the 5th line of the song beginning with “শিতকাল হৈতে বন্ধুর সহিতে পরাণে পরাণে নেহা।” (Padalahari, p. 214). The two songs differ in their readings.

আমার অঙ্গের সৌরভ সখি

যখন বেদিগে পায়।

বাউল হইয়া বাহু পসারিয়া

তখন সেদিকে ধায় ॥—Sāhitya-Parishad MS.

No. 2041.

আমার অঙ্গের বরণ সৌরভ
 যখন যেদিকে পায় ।
 বাহু পসারিয়া বাউল হইয়া
 তখন সে দিকে ধায় ॥—Padalahari.

(26). There is a song in the Parishad MS. No. 978, beginning with the line “ননদী গ রহিতে নারিলাঙ ঘরে ।” This song differs much in readings from the song found in the Padakalpataru, the Vaisnava-padalahari, and other published anthologies of Vaisnava songs.

ননদি গ রহিতে নারিলাঙ ঘরে ।
 না দেখি না শুনি এমন দেবতা
 যুবতী দেখিয়া ভুলে ॥—MS. No. 978.
 ননদি গো রহিতে নারিলাঙ ঘরে
 না দেখি না শুনি এহেন দেবতা
 যুবতী দেখিয়া ভুলে ॥—MS. No. 331.
 শশি তেজি রাহু পসারিয়া
 ঘোরে গরাসল আসি ।—MS. No. 978.
 হেনই সময় সে বন দেবতা
 ঘোরে গরাসিল আসি ॥—Padalahari.
 গরাস তরাসে আকুল হইয়া
 মুরছি পড়িলো ভূমে ।
 তোর নাম ধরি শতেক ডাকি লেঁ।
 গুনিয়া না গুনিলি কানে ॥—MS. No. 978.
 গরাস তরাসে আকুল হইয়া
 মুরছি পড়িলু ভূমে ।
 তোর নাম ধরি কত না ডাকিলু
 গুনিয়া না গুনিলি কানে ॥—Padalahari.
 তোর নাম ধরি বত না ডাকিলু
 গুনি না গুনিলি কানে ॥
 —Padakalpataru, Parishad edition.
 তোর নাম ধরি কত শতেক ডাকিলু
 গুনিয়া না গুনিলি কানে ॥ —MS. No. 331.

এ মোর বিতথা সে বন দেবতা

হাসিয়া ভুলাল রঞ্জে ।

—MS. No. 978.

এ মোর বিতথা সে বন দেবতা

শুনি চমকয়ে চিতে ।

—Padakalpataru, Parishad edition.

এ মোর বিতথা সে বন দেবতা

হাসিয়া ভুবিল রঞ্জে ।

—MS. No. 331.

এ মোর বিতথা সে বন দেবতা

শুনি চমক এ চিতে ।

—Padalahari.

এ বোল শুনিয়া ননদী চমকি

ভ্রমিয়া বেড়াল ভীতে ॥

—MS. No. 978.

এ বোল শুনিয়া ননদী চমকি

ভ্রমিয়া বুলায়ে ভীতে ॥

—Padakalpataru, Parishad edition.

(27). The song beginning with the line “সহজে হুনিব পুতলি গোবী,” as found in the University MS. No. 331 differs much in readings from the song in the Padakalpataru.

গলাএ গজ মতিম হার ।

—Padakalpataru, Parishad edition.

গলায়ে গজ মুকুতা হার ।

—MS. No. 331.

বাসন যাইতে গুরুয়া তার ।

—Padakalpataru, Battala edition.

বসন বহিতে গুরুয়া তার ।

—Padakalpataru, Parishad edition.

স্বমের উপরে চামর ডোল ।

—Padakalpataru, Parishad edition.

স্বমের শিখরে চামর ডোল ।

—MS. No. 331.

সমতি না দেই সতত রোয় ।

—Padakalpataru, Parishad edition.

সমতি না দেই দিন রজনী বোয় ॥

—Padakalpataru, Battala edition.

সমতি নাহি দিল রজনী বোয় ॥

—MS. No. 331.

(28). The song beginning with “সহজহি শ্রাম সুকোমল শীতল, etc.,” as found in the MS. No. 331 differs much in readings from the song in the Vaisnavapadalahari.

সো তনু পরশ পবন নব পরশিতে
মলয়জ পঙ্ক শুখায় ॥ —Padalahari.

সো তনু পবন পরশ নব পরশিতে
মলয়জ পঙ্ক শুকায় ॥ —MS. No. 331.

সজনি, কতয়ে বুঝায় নীতি । —Padalahari.

সজনি, কত না শিখাওব নীতি । —MS. No. 331.

বিরহ অনলে দিয়া জারি । —Padalahari.

বিরহ অনলে হিয়া ডারি । —MS. No. 331.

সজল নলিনী দলে শেজ বিছায়ই । —Padalahari.

নীল নলিনী দলে শেজ বিছায়ই । —MS. No. 331.

(29). The song beginning with the line, “চিকণ কালার রূপ মরমে লাগিয়াছে,” has been found in the manuscript No. 340, Calcutta University Library. This song is to be found in none of the published editions of the poet, except in the Vaisnavapadalahari. But the song in the manuscript and the song in the Vaisnavapadalahari differ much in readings.

Thus in the song belonging to the manuscript, the 7th line is :—

কালিয়া মেঘেতে যেন বিজুরি সঞ্চারে গো ।

while in the Vaisnavapadalahari the version is :—

নবীন মেঘের কোলে বিজুরি প্রকাশ করে ।

The 9th line of the song in the manuscript is :—

পীত বসন ধবল চন্দন
হিজুলে মণ্ডিত হুটি আঁখি ।

while in the Vaisnavapadalahari we have :—

ভুরু ষুগ সন্ধান কামের কামান বান
হিজুলে মণ্ডিত হুটি আঁখি ॥

The version of the manuscript is :—

আড় নয়নের কোনে চাঞাছিল মোর পানে
সেই হৈতে শ্রামময় দেখি ।

while in the Vaisnavapadalahari the lines are :—

অরুণ নয়ান কোনে চাঞাছিল আমা পানে
সেই হৈতে শ্রামরূপ দেখি ॥

(30). Then again, we have found a song in the Sahitya-Parishad MS. No. 201, beginning with the line “বৃন্দাবন বিপিনে প্রবেশল রাই ।” the 5th line of which is the starting line of a song found in the Padakalpataru (Satis Ray's edition, Vol. II, p. 321). The first four lines of the song are totally absent from the song in the Padakalpataru. And though the song in the MS. resembles much the song in the Padakalpataru, there is a good deal of difference in their readings.

The song as found in the MS. is this :—

বৃন্দাবন বিপিনে প্রবেশল রাই ।
ছহ তলু উলসিত ছহ মুখ চাই ॥
করতহি কানু ধরল ধনি কোর ।
নব সৌদামিনী কিয়ে জলদ অগোর ॥
রাস দিলাসে রসিক বর নাগর
বিলসই রসবতী মাঝে ।
ছহ বনি বেশ বয়স বৈদগ্ধি
অবধি করিয়া ধনি সাজে ॥
মধুকর ধ্বনি শুনি শুক মুখ রাব ।
কোকিল কুলগুরু পঞ্চম গাব ॥
ফিরত মনোহর ময়ূরক পাতি ।
মদনক হাট পড়ল দিন রাতি ॥
বাজত বিবিধ যন্ত্র একুতান ।
নিজ পরসঙ্গে রঙ্গে সব গান ॥
নারী পুরুষ সবে ভাবে বিভোর ।
জ্ঞানদাস কহ কি কহব ওর ॥

The song as found in the Padakalpataru is given below :—

রাস বিলাসে রসিক বর নাগর
 বিলসই রসবতী মাঝে ।
 দ্রুহ বনি বেশ বয়স বৈদগ্ধি
 অবধি করিয়া ধনী সাজে ॥
 এক অপরাপ রস এই ক্ষিতি মণ্ডলে
 মধুময় কুসুমিত কুঞ্জে ।
 রাধা রাতি দিবস রস আরতি
 শ্রামর ঘন রস পুঞ্জে ॥
 অলিকুল রব শুক রাব ।
 কোকিল কুলশুক পঞ্চম গাব ॥
 ফিরত মনোহর ময়ূরক পাতি ।
 মদনক হাট পড়য়ে দিনরাতি ॥
 বাজত বিবিধ যন্ত্র একতান ।
 নিজ রস রঙ্গে সঙ্গে রস গান ॥
 নারী পুরুষ দুহুঁ ভাবে বিভোর ।
 জ্ঞানদাস কহ কি কহব ওর ॥

(31). The following song by Jnanadas, found in the MS. No. 336, (C. U.), dated 1805 A. D., is found published only in a recent anthology entitled Vaisnavapadalahari, where the song shows a quite different reading from the song found in the University MS.

Thus the first two lines of the song

কবরি বেঢ়ল মালতি মাল ।
 তাহে বিরাজিত ভ্রমরি জাল ॥

are totally absent from the song in the Vaisnavapadalahari.

Then again, the 2nd and 3rd lines of the song in the MS.

ভালের উপরে সিন্দুর বিন্দু ।
 চৌদিকে উদয় নবিন ইন্দু ॥

are also absent from the song in the Padalahari.

The 19th and 20th lines of the song in the MS. are :—

কেসরি সোসর মাঝ বিভঙ্গ ।
 তুবলি বলিত জল তরঙ্গ ॥

while in the Padalahari the reading of the lines are :—

কেশরী সোসরি মাঝারি অঙ্গ ।
ত্রিবাণি যৌবন জনি তরঙ্গ ॥

The entire song is quoted below :—

কবরি বেঢ়ল মালতি মাল ।
তাহে বিরাজিত ভ্রমরি জাল ॥
ভালের উপরে সিন্দূর বিন্দু ।
চৌদিকে উদয় নবিন ইন্দু ॥
কনক বয়নি কনক কাঁতি ।
মুকুতা নিকর দশন পাঁতি ॥
নাসা তিল মৃহ কুসুম তুল ।
কাজরে মাজল দিঠি ত্রুকুল ॥
চলল হরিণী নয়নি রাই ।
ত্রিভুবনে বার তুলনা নাই ॥
অরুণ অধরে হসন ইন্দু ।
চবুকে স্তম্ভর সামর বিন্দু ॥
উচ কুচযুগ কনক গিরি ।
হিয়ার মাঝারে কনক ছুরি ॥
পবন ভরল বসন মেলি ।
দামিনী বেঢ়ল চন্দ্র নিমলি ॥
নীলবসন শ্যাম সোহাগ ।
জলদ পটল রূপক লাগ ॥
কেশরি সোসর মাঝ বিভঙ্গ ।
ত্রিবাণি বলিত জল তরঙ্গ ॥
মদন বিমান চাক নিভঙ্গ ।
উলট কদম উরু আরঙ্গ ॥
নিবিএ বাকুল বেলন আদ ।
উলট কমল ফুটল আধ ॥
কটির উপরে কিঙ্কিনি নাদ ।
রতন মঞ্জির কর বিবাদ ॥

চরণ কমল সিতল ছায় ।
জ্ঞানদাস মন জুড়ায় ভায় ॥

It is to be noted that the lines,

নীলবসন শ্রাম সোহাগ ।
জলদ পটল রূপক লাগ ॥

are absent from the song in the Padalahari.

(32) The following song is attributed to Jnanadas in the University MS. No 327 (about 150 years old) :

বন্ধু হে কি আর বলিব তোরে ।
অলপ বএসে পীরিতি করিয়া
রহিতে নারিলাঙ ঘরে ॥ etc.

While the same song is attributed to Chandidas in the Parishad edition of the songs of the poet.

The above song has also been found in the Sahitya-Parishad MS. No 201 with Jnanadas's name in the colophon. Thus we get the song in two different MSS. with the name of the same poet, *i.e.*, Jnanadas, while in Nilratan Babu's edition of Chandidas the same song is attributed to Chandidas. Thus the question of the authorship of the song still remains unsolved, and we cannot decide the point till we have got sufficient further proofs to solve the question in one way or the other.

For comparison we give below the song as found in the Sahitya-Parishad manuscript, and as found in the MS. No. 327, Calcutta University.

The song in the MS. No. 327 (C. U.) is this :—

বন্ধু হে কি আর বলিব তোরে ।
অলপ বএসে পীরিতি করিয়া
রহিতে নারিলাঙ ঘরে ॥
কামনা করিয়া সাগরে মরিব
সাধিব মনের সাধা ।
মরিয়া হইব শ্রীনন্দের নন্দন
তোমাতে করিব রাখা ॥

পীরিতি করিয়া ছাড়িয়া যাইব
 রহিব কদম্ব তলে ।
 ত্রিভঙ্গ হইয়া মুরলী পুরিব
 জখন যাইবে জলে ॥
 মুরলি গুনিয়া মুরছা হইবে
 সহজে কুলের বালা ।
 জ্ঞানদাস কহে তবে সে জানিবে
 পীরিতি বিষম জালা ॥

The song found in the MS. No. 201 (Sahitya-Parishad) is follows:—

ওহে বন্ধু আর কি বলিব তোরে ।
 আপনা খাইয়া পীরিতি করিহু
 রহিতে নারিহু ঘরে ॥
 কাম সাগরে কামনা করিয়া
 সাধিব মনের সাধা ।
 আপনি হইব নন্দের নন্দন
 তোমায়ে করিব রাধা ॥
 পীরিতি করিয়া ছাড়িয়া যাইব
 রহিব মথুরা পুরে ।
 আমার বিচ্ছেদে তাপিনি হইয়া
 রহিতে নারিবে ঘরে ॥
 নওবা যাইব জখন জলে
 রহিব কদম্ব তলে ।
 ত্রিভঙ্গ হইয়া মুরলি পুরিব
 জখন জাইবা জলে ॥
 মুরছা হইয়া পড়িয়া রহিব
 সহজে কুলের বালা ।
 জ্ঞানদাস বোলে যে বোল সে হয়
 পীরিতি বিষম জালা ॥

(33) The following song has been attributed to Chandidas in Nilratan Babu's edition of the poet. But we get the same pada in Sahitya-Parishad manuscript No. 201 with Jnanadas's name in the colophon. The entire pada is given below .—

আজ্জুকার রাতে ননদী সহিতে
 সপনে দেখিছু সহি ।
 যে ছিল করমে বন্ধুর ভরমে
 মরম তোমায়ে কই ॥
 নিন্দের আলিসে বন্ধুর ধাধসে
 সঘনে করিছু কোরে ।
 তখনি কথিয়া বলিছে উঠিয়া
 এমন করহ ভোরে ॥
 লোকের বদনে যে শুনি শ্রবণে
 নয়নে দেখিছু তাই ।
 দাদা আইলে ঘরে করিব গোচরে
 খানিক ধোয়াও রাই ॥
 নিরস বচনে কাপিছু পরাণে
 মরিয়া থাকিছু লাজে ।
 ফিরাইয়া আঁখি গরবা থাকি
 সঘনে আমারে তাজে ॥
 এক হাথে সখি কচালয়ে আঁখি
 প্রভাতে দেখিছু আর ।
 জ্ঞানদাস কয় তার কিবা হয়
 কাহুর পীরিতি জার ॥

(34) The song beginning with the line রূপ দেখি আঁখি মোর পুণ নাহি নেওটই.....has been found in the M.S. No. 340, Calcutta University. This song is to be found nowhere except in the Vaisnavapadalahari. But the song in the manuscript, and the song in the Padalahari differ much in readings.

Thus the song in the MS. begins with the lines :—

রূপ দেখি আঁখি মোর
পুন নাহি নেওটই
মন অক্লুগত নিজ লাভে ।

while the same song in the Padalahari begins with the lines :—

মুরতি পীরিতি বরদাতা ।
প্রতি অঙ্গে অনঙ্গ স্নখ সায়র নায়র নিরমিল ধাতা ॥

which constitute the 2nd stanza of the song in the manuscript.

Then again the concluding lines of the song in the manuscript differ in readings with the concluding lines of the song in the Padalahari.

Thus in the song in the MS. the concluding lines are :—

ওরূপ হেরইতে অন্তরে অবরহ
বিছুরণ না হয়ে সপনে ।
জ্ঞানদাস কহে না জানি কি জানি হয়ে
যব হব তনু তনু মিলনে ॥

while in the song in the Vaisnavapadalahari the concluding lines are :—

অঞ্চলিতে হৃদয়ক অন্তরে অপরহ
পাসরিল না হয় স্বপনে ।
জ্ঞানদাস কহে তবহু কৈছন হয়ে
তনু তনু যব হয় মিলনে ॥

(35) The song beginning with the line,

চিকণ কালিয়ার রূপ মরমে লাগিয়াছে
ধরণে না যায় মোর হিয়া ॥

has been found in the MS. No. 340, C. U.

This song is not found in any of the published editions of the poet except in the Vaisnavapadalahari.

But the song in the manuscript, and the song in the Padalahari differ much in readings.

Thus in the song of the MS. the reading of the 7th line is :—

কালিয়া মেঘেতে যেন বিজুরি সঞ্চারে গো
জাতি কুল মজাইলাঙ তায় ॥

While in the song of the Padalahari the lines are :—

নবীন মেঘের কোলে বিজুরি প্রকাশ করে
জাতি কুল মজাইলাঙ তায় ॥

The 9th line of the song in the MS. is :—

পীত বসন ধবল চন্দন
হিজুলে মণ্ডিত দুটি আঁখি।

While in the Padalahari the lines are :—

ভুরু যুগ সন্ধান কামের কামান বান
হিজুলে মণ্ডিত দুটি আঁখি।

In the song found in the manuscript the lines are :—

আড় নয়নের কোনে চাঞাছিল মোর পানে
সেই হৈতে শ্রাম ময় দেখি ॥

While in the Padalahari the lines are :—

অরুণ নয়ান কোনে চাঞাছিল মোর পানে
সেই হৈতে শ্রামরূপ দেখি ॥

The concluding four lines of the song in the MS. are :—

শ্রাম চিকনিয়া রূপ বিধি নিরমিঞাছে
প্রতি অঙ্গে বলকে দামিনী।
সেই না রূপের ছান্দে অলুক্ষণ প্রাণ কান্দে
জ্ঞানদাস রূপের নিছনি ॥

While the concluding lines of the song in the Padalahari are :—

যমুনার ঘাট হৈতে উঠিয়া আসিতে পথে
সখি কিবা অপরূপ তহু।
জ্ঞানদাসেতে কয় স্নধুই সে স্নধাময়
গোকুলে নন্দের বালা কাহু ॥

(36) The following song with quite a different reading can be traced in Nilratan Babu's edition of Chandidas, p. 134, and also in Satis Ray's edition of Padakalpataru, p. 158.

We quote here the song as found in the MS. No. 324 (C. U.) :

কি আর বুঝাও কুল ধরম বিচার
মন স্বতন্ত্র নয় ।
কুলবতী হঞা রসের পরাণ
কতু জানি কাহার হয় ॥
কাহ্ন সে জীবন জাতি প্রাণ ধন
হুখানি আঁখের তারা ।
পরাণ অধিক হিয়ার গুতলি
নিমেষে বাসিএ হারা ॥
সব সমাপিত বচন তোমার
যেন বাজিয়ার বাজি ।
মুখে সরবস হৃদয়েতে আন
কাজের গতিকে বুঝি ॥
সকল ফুলে ভ্রমরা বলে
কি তার আপন পর ।
জ্ঞানদাস কহে কাহ্নর পিরিতি
কেবল হুখের ঘর ॥

The last stanza beginning with the line “সকল ফুলে ভ্রমরা বলে,” is found in Nilratan Babu's edition with Chandidas's name in the colophon,—and the Vaisnavapadalahari and Ramani Babu's edition also support this. Hence we are inclined to believe that though the body of the song might have been Jnanadasa's composition, the last stanza belongs to Chandidas. The last stanza but one of the song beginning with “সব সমাপিত বচন তোমার,” and ending with the line “কাজের গতিকে বুঝি,” is altogether a new thing. It is neither to be found in the above printed editions of Chandidas, nor in the song attributed to Jnanadas in the Padakalpataru.

(37) The following song has neither been published in any of the recent editions of Jnanadas, nor can be found in any of the old anthologies of Vaisnava songs, such as, the Padakalpataru, the

Padakalpalatikā, the Padāmṛtasindhu, the Gourapadatarangini, etc., nor even in the work entitled Aprakāshita Padaratnāvali, which is a collection of up-to-date unpublished Vaisnava songs, edited by Mr. Satish Chandra Ray, M.A.

I give below the song as found in the MS. No. 2416, (Sahitya-Parishad) :

নিশুহি নলিনি প্রায় তেজিল আহার ।
 বসিলে উঠিতে দেহে লাগে আত্মভার ॥
 বাহা বৈসে তাহা ভাসে নয়ানের জলে ।
 কহে প্রাণ প্রিও মোর এ দশা করিলে ॥
 প্রিয়া প্রেম ব্যাধে ধনি অস্থি চৰ্ম্ম সার ।
 তিকিচ্ছক নাহি মিলে না হয় প্রতিকার ॥
 জ্ঞানদাস বলে কৃষ্ণ পরম সঙ্গী ।
 সঙ্গী বিনা নাহি ছুটে প্রেম ব্যাধি ॥

(38) The song beginning with the line “দেখরি সখি শ্রাম চন্দ ইন্দু বদনী রাধিকা,” etc., has been found in the MS. No. 331 (C. U.) with a few additional lines, which are totally absent from the same song in the Padakalpataru, with Jnanadasa's name in the colophon.

The following are the additional lines :—

ফুটল কুসুম অলিক মেঘি ।
 কোকিল কুহরে বিরহ কেলি ॥
 কপোত নাচত আপন রঙ্গে ।
 রাই নাচত কান্নক সঙ্গে ॥
 বিবিধ যন্ত্র এক তান ।
 গায়ত বায়ত খণ্ড মান ॥
 তাতত তাতা দৃমিকি মৃদঙ্গ ।
 তাহে করত অঙ্গ ভঙ্গ ॥

In the manuscript No. 324 (Calcutta University) the song beginning with the line “বিদগধ নাগর নাগরী রসিয়া” has got the additional lines :—

অতি রসে আউল্যাইল কালা গোরা অঙ্গ ।
 উৎলিল প্রেম সিদ্ধ বহল তরঙ্গ ॥

The above two lines are absent from the same song in the Padakalpataru and other published anthologies.

Then again, in the Padakalpataru we have :—

“পূর্ণিম চান্দ মুখে স্বেদ বিন্দু বিন্দু ।”

While in the manuscript we have :—

“প্লবিত ছহু তহু স্বেদ বিন্দু বিন্দু ।”

There is a line in the song found in the manuscript, which is absent from the song in the Padakalpataru. The line is :—“চৌদিকে কুসুম তরু লতা লোলে বায় ।”

(39) There is a song in the Vaisnavapadalahari (p. 202), beginning with the line “নিতি নিতি যায় রাই যমুনা সিনানে.” In the University Manuscript No. 331 we get the same song attributed to Banshibadan. Now the dispute arises as to whom the song should be attributed. I think, the Vaisnavapadalahari has made a mistake in attributing it to Jnanadas ; for nowhere except in that work the above song is found with Jnanadasa's name in the colophon ; and in the Padakalpataru, which is one of the most authoritative anthologies of Vaisnava songs, we get the song attributed to Banshibadan. There is of course a slight difference in readings between the song in the manuscript and the song in the Vaisnavapadalahari. Thus the opening two lines of the song in the Vaisnavapadalahari are :—

“নিতি নিতি যায় রাই যমুনা সিনানে ।

না দেখি না শুনি তার পদ কোন দিনে ।”

While in the manuscript we have :—

“নিতি নিতি যায় রাই যমুনা সিনানে ।

কভু না দেখি না শুনি তার বিপদ সপনে ।”

Now let us quote the unpublished songs of Jnanadas which we have found in the old manuscripts.

(1) সাজনি লো যুগনয়নি রাই ।

জিভুবনে রূপের তুলনা দিতে নাঞি ॥

বেনি বোনাওত বেগন জাদ ।

উলট কমলে ফুটল আধ ॥

নাসা তিলক ফুল কুমুদ শুন ।
 কাজরে মাঝল দিঠি দুকুল ॥
 নিলবসন কনয়া গিরি ।
 হিয়ার মাঝারে কনক বুরি ॥
 অঙ্গের বসন উড়িছে বায় ।
 ধিরে চলিয়া চলিয়া যায় ॥
 চলন খঞ্জন হুপুস পায় ।
 জ্ঞানদাস মন রহুক তার ॥

(Calcutta University Manuscript No. 329.)

- (2) একে নব কিসোর বয়স মনি কাঞ্চনে আভরণ চুড়াটি চিকন বনান ।
 হেরইতে রূপ সাঅরে মন ডুবল বহু ভাগ্যে রহল পরাণ ॥
 শ্রাম অতি পথের মাঝে ।
 হাম অবলায়ে একলা জনে জাইতে বিসরল সব নিজ কাজে ॥
 নআন সন্ধানবানে তহু ভেল জরজর কাতর বিনি অবলছে ।
 পুলকে পুরল তহু বসন খসয়ে ঘন পানি না পুরল কুন্তে ॥
 ঘর নহে আর হেন জাগিতে সপন যেন আর অতি সহনে না জায় ।
 জ্ঞানদাস কহে মনে অহু-মানহ বাস করব তরু ছায় ॥

(Calcutta University Manuscript No. 339.)

- (3) চঞ্চল মন চকিত নয়ান আবেষ্টা অঙ্গ এল্যাণি ।
 ঘরের বাহির তিলে শতবার কোথা না দেবা পায়লি ॥
 জটিল গুলিলে হবে পরমাদ আমাদিগে বুঝি বহালি ।
 রাজনন্দিনি কুলের কামিনি সব কুল বুঝি মজালি ॥
 ইকি বিপরিত চিত চোমকিত লোক জনে সব হাসালি ।
 এই পথে নিতি করে আনাগোনা গুরুজনা বুঝি জানালি ॥
 গোকুল নগরে প্রীতি ঘরে ঘরে তোরে বলে রাজ হুলালি ।
 রাআ উতপল নয়ান জুগল কেন্দে কেন্দে আঁখি ফুলালি ॥
 একে কুলবালা সহজে অবলা এত ধূয়ে কেনে আইলি ।
 এই রাজ পথে কেহ নাই সাথে কলঙ্কিনি নাম ধরিলি ॥
 বন্ধু গেল বনে ভাঙাই কেনে চাতকিনি পায়া রহিলি ।
 জ্ঞানদাস ভনে নিবেদি চরণে গুন ব্রজ ভানু হুলালি ॥

(Calcutta University Manuscript No. 339.)

তখন করে ধরাধরি যতেক স্তম্ভরী জাকর ব্রজবালা ।
 যেন আমরা তেজি ক্ষিতি পৈঠন যৈছন নব বালা ॥
 কিবা পদভূষণ মন্দিরা সনে চরণাশুজে বাজে ।
 তখন নৈছে স্তরারি লাখ লাখ এক হয়ে সাজে ॥
 হৃদিকে হুই সখীর স্বক্কে করে আরোপিয়া ।
 বৃন্দাবনে প্রবেশল শ্রাম জয় দিয়া ॥
 বৃন্দাবনে প্রবেশিয়া চারিদিকে চায় ।
 মাধবীলতার আড়ে দেখে শ্রামরায় ॥
 শ্রামের বামে দাড়াইয়া রসের মঞ্জরী ।
 জ্ঞানদাসে মাগে রাজা চরণ মাধুরী ॥

(A manuscript entitled “Padāmṛtasindhu” in the possession of Dr. D. C. Sen.)

(৪) ওহে কানাই বুঝিলাম তোমার চরিত ।
 আগে আহাৰ দিয়ে মারয়ে বাঙ্কিয়ে
 এমতি তোমার রিত ॥
 যখন আমারে সদয় আছিলে
 পিরীতি করিলে বড় ।
 এখন কি লাগি নিদারুণ হইলে
 সেলের সমান দড় ।
 বুঝিছ মরমে যা ছিল করমে
 সেই সে হইতে চায় ।
 নহিলে কোপন থলের বচন
 পরাণ সঁপিছ তায় ॥
 তোমার পিরীতি দেখিতে স্তম্ভিতি
 যে হুখ উঠিছে চিতে ।
 সে নারী মরুক যে করে ভরসা
 তোমার পিরীতি রীতে ॥
 দেখিতে শুনিতে মানুষ আকার
 আছিল আছিলে যবে ।
 হিয়ার ভিতর যে জন পুড়িছে
 সে হুখ কহিব কারে ॥

পূরবে জানিতাম হইবে এমতি
 পাইব এতেক লাঞ্জে ।
 জ্ঞানদাস কহে ধৈর্যজ ধরহ
 আপন সখের কাজে ॥

(From Padāmṛtasindhu, a manuscript in the possession of Dr. D. C. Sen.)

- (9) কি শোভা বিনোদ ঝুলনে ।
 বিনোদিনী বিনোদের সনে ॥
 বিনোদ বিনোদ ফুলের মালা ।
 বিনোদ গাঁথনি করে আলা ॥
 বিনোদ বসন দৌছে পরি ।
 বিনোদ বিনোদ কথা কহে ধিরি ধিরি ॥
 বিনোদ বিনোদ সখী গনে ।
 বিনোদ বিনোদ করে গানে ॥
 বিনোদ পবন তাঁহি বহে ।
 বিনোদ স্নগন্ধে মন মোহে ॥
 বিনোদ বনের শোভা কত ।
 বিনোদ বাকারে মধু ব্রত ॥
 বিহরে বিনোদ রস ভরে ।
 জ্ঞানদাস বিনোদ অন্তরে ॥

(From Padāmṛtasindhu, a manuscript in the possession of Dr. D. C. Sen.)

- (10) আনত যে মাধব আনত যে রাই ।
 ধনি মুখ বন্ধিষ ওর না পাই ॥
 ঐছন সময়ে হাম মন্দিরে গেল ।
 হিম্ম জেন বাজল নিরদম্ম শেল ॥
 সুন সুন রে সখি কামুক চরিত ।
 শুনি অবতে নব ঐছন পিরিত ॥
 পিয়া অহুযোগল ঐছন আছ ।
 রাই পরবোধল উনহিক পাছ ॥

কর জোরে হাসি বিনয় জব কান ।
 রাই নিশি উঠে সজল নয়ান ॥
 হুহ মন জানি সোপনু হুহ তাথে ।
 হুরদিন কিয়ে ভেল পরভাতে ॥
 রোখল মনমথ তব দিন আনি ।
 জানদাস কহে বুঝর সজানি ॥

(Sāhitya Parishad Manuscript No. 201.)

- (11) রস পরসঙ্গ গুনই স্মৃথ পাব ।
 রসবতি সঙ্গ ছোড় নাহি জাব ॥
 আধ পদ বাই চাহি আধা ।
 মনমথ আগে দেই সব বাধা ॥
 এ সখি এ সখি বুঝই না পারি ।
 কি যে ধনি বালা কি যে বরনারী ॥
 হামরা, হুহজনে পথে একু মেলি ।
 সো আন জন সনে করু আন কেলি ॥
 জব কিছু পুছই উত্তর না পাব ।
 অধরক পাষ হাস পসি বাব ॥
 ঐছন রমনি দৈব দিন সঙ্গে ।
 বিহি উদগিম চাহি দিন ভঙ্গে ॥
 হেঁসে লাজ বস হামারি ও লাজ ।
 জানদাস কহ দূরে রহ লাজ ॥

(Sāhitya Parishad Manuscript No. 201.)

- (12) কি হেরিলু জলধরে বিদ্যাত কাঁতি ।
 রক্তোতপল পর চান্দক পাঁতি ॥
 কনক লতা তহি বেঢ়ল সঙ্গে ।
 উয়ল পদ্ম সরোবর সঙ্গে ॥
 তছু পর বৈঠল বকগণ পাঁতি ।
 কত শত ভানু লেই রহ সাধি ॥
 নীল লতা ধরু জাবক রঙ্গ ।
 কুমুদ বজ্রগণ লেই রহ সঙ্গ ॥

সৌদামিনি মাঝে মোতিম মাল ।
 উতপলে বিদ্যুত গগু রসাল ॥
 শিহরে চান্দ রহত অতি জোর ।
 কাম ধনুএণ ধর ফিরে চকোর ॥
 মেঘ গিরিবরে বেঢ়ল কত চান্দ ।
 তাঁহি বেঢ়ল কত কুলবতি ফান্দ ॥
 তছু পর ইন্দ্র লোচন রহ থির ।
 হেরি জ্ঞানদাস অবগ সরির ॥

(Sāhitya Parishad Manuscript No. 201.)

- (13) পুরুষ লাখগুণ লেখিয়া রতন না দেখিয়া না দেখিহু পাছে ।
 এ ঘরে হইহু পর সে স্ত্রী সব ছর এ নারি আছে কিনা আছে ॥
 সই, কি আর বোলসি মোরে ।
 এ পাপ চিতে নিতি জতেক উপজে সে কথা কহিব কারে ॥
 পিরিতি বিচ্ছেদ মিরিত অধিক কহিল কতেক জনে ।
 সে সব বচন শ্রবনে না শুনি সে ফল ভুজিএ এখনে ॥
 মনের আগুনি মনে নিভাইয়া আপনা আপনি বুঝাই ।
 জ্ঞানদাস বোলে তখন যে পড়ে সে সব চাইতে চাই ॥

(Sāhitya Parishad Manuscript No. 201.)

- (14) না জানি কি জানি কৈল কালিয়া বরণে ।
 শ্রামরূপ দেখিলে এমন হবে জানিব কেমনে ॥
 তাহে এক তাপ দিল পাপ ননদিনি ।
 ব্যাধের মন্দিরে জেন কম্পিত হরিনি ॥
 আর ছন ছখ দিল মুরলির সরে ।
 কুলিন সাপিনি জেন গরল উগরে ॥
 অহুখন চিত মোর শ্রাম অহুরাগি ।
 জে মোরে ছাড়িতে বলে হবে বধের ভাগি ॥
 জ্ঞানদাস কহে সেই সে করিব ।
 কান্থর পিরিতি লাগি পরাণ হারাব ॥

(Sāhitya Parishad Manuscript No. 201.)

- (15) বাহার লাগিয়া সকল ছাড়িছ সে কেনে বাসয়ে পর ।
 পিরিতি করিয়া কি জানি হইল সদাই অন্তরে জ্বর ॥
 সৃজন কুজন না চেনে যে জন তাহারে বলিব কি ।
 মরম বেদন যে জন জানয়ে তাহারে পরাণ দি ॥
 প্রেম সাগরে একটি কমল রসের সাগর মাঝে ।
 প্রেম পরিমলে লুবধ ভ্রমর ধাবই আপন কাজে ॥
 ভ্রমর জানিলে কমল মাধুরি তেঞি তার হয় বস ।
 রসিক জানই রসের চাতুরি অগ্র করে অপবশ ॥
 সোণার গাংরি জেন বিষে ভরি ছধে পুরি তার মুখ ।
 বিচার না করি জেবা জন খায় পরিণামে পায় দুখ ॥
 জ্ঞানদাস কহে গুণগ গুন্দরি একথা বুঝিবে পাছে ।
 শ্রাম বন্ধু সনে পিরিতি করিয়া কেবা কোথা ভাল আছে ॥

(Sāhitya-Parishad Manuscript No. 201).

- (16) কেনা জানে কিনের দান, কি বোল বলহি কান
 অগ্র হইলে আমি ভাল জানি ।
 যদি পুণ এমন বল তবে পাবে প্রতিকল,
 হাসিবে অনর্থ পছ গুনি ॥
 গুন গুন সৃজন কানাই তুমি ত নওগ দানি ।
 বিকির দান গোরসে মানিয়ে বেশের দান কভু নাহি গুনি ॥
 অলসে অলসে সঘনে সঘনে বচন করহ মিঠি ।
 সব আভরণ থাকিতে হিয়ার হারে বসাইলে দিঠি ॥
 মদনে আকুল আপনা দ্রুত কি লাগি কলঙ্ক কর ।
 জ্ঞানদাসে কয় ইঙ্গিত হইলে কি লাগি বাছ পসার ॥

(From "Padāmṛtasindhu," a manuscript in the possession of Dr.
 D. C. Sen).

- (17) শ্রাম গুণ পাখী স্তম্ভর দেখি ধরলাম নয়ন ফাঁদে ।
 হৃদয় পিঞ্জরে রাখিলাম সাদরে মনহি শিকল বেঁধে ॥
 তারে রেখেছিলাম প্রেম স্তম্ভানিধি দিয়া ।
 তারে যতনে পুসি পানি ধরাইলাম বুলি ডাকিতে রাখা বলিয়া ॥

সে হয়ে অবিস্বাসি কাটিয়া আকুশি পলাইয়া গেছে ধরে ।
 সন্ধান করিতে পাইলু শুনিতে নাকি কুজা রেখেছে ধরে ॥
 আপাতত ধোপ বলিতে প্রার্থনা শ্রীমতী পাঠাইলে মোরে ।
 জ্ঞানদাস নিজে এমত করিলে পেতে পারে কিনা পারে ॥

(From "Padāmṛtasindhu," a manuscript in the possession of Dr. D. C. Sen).

- (18) বিরহে আকুল ধনি নারে সন্ধানিতে ।
 কৃষ্ণ কৃষ্ণ বলি প্যারী লাগিল কান্দিতে ॥
 ললিতা বিশাখা তখন মনে বিচারিল ।
 প্রবোধিতে বিরহিনীর উপায় ঝাঁটিল ॥
 না কান্দ না কান্দ রাই শুন কৃষ্ণ প্রিয়া ।
 চল কৃষ্ণ বিলাসের ছলে দেখি গিয়া ॥
 শুনি ধনি বিরহিনী উঠিল তখনে ।
 সখী সঙ্গে চলে রাই বিলাসের ছলে ॥
 বিরহে হ্রস্বল দেহ ধীরে ধীরে চলে ।
 জ্ঞানদাস কহে বিধুমুখী আইল তরুতলে ॥

(From "Padāmṛtasindhu," a manuscript in the possession of Dr. D. C. Sen).

- (19) কি হেরিলাম কালিন্দীর ঘাটে ।
 সেই হৈতে প্রাণ মোর কেন্দে কেন্দে উঠে ॥
 কিবা সে রসের অঙ্গ সূধা চল চল ।
 চুড়ার উপরে চাঁদ করে ঝল মল ॥
 গগনে একই চাঁদ ইহাই মোরা জানি ।
 ঘাটের কূলে চাঁদের গাছ কে রোপিল আনি ॥
 হাতে চাঁদ পায়ে চাঁদ আর চাঁদ কপালে ।
 এমন কভু শুনি নাই যে চাঁদের গাছ চলে ॥
 দশ চাঁদ নাচে গায় মুরলির রঞ্জে ।
 আর দশ চাঁদ রাঙ্গা চরণার-বিন্দে ॥
 চরণে পড়িয়া চাঁদ হইল বিভোল ।
 মালতীর মালা তাহে চাঁদে দিছে কোল ॥

আমি সে অবলা কৈছে কুলেতে রহব ।
জ্ঞানদাস কহে তোমায় সাজায়ে যে দিব ॥

(From "Padāmṛtasindhu," a manuscript in the possession of Dr. D. C. Sen).

(20) সহজই আনন সুন্দর রে
ভাঙ সুরেখলি জাঁখি ।
পঙ্কজ মধুকর পিবি মধুবনে
উভয়ে পসারল পাখি ॥
অন্তরে ধাওল মেরি লোচন রে
জাহি জাহি গেল বরনারী ।
আসা লুবধ না তেজই রে
কুপনক পাছে ভিখারি ॥
অন্তরে রহল মন মোর রে
কনক কুচ গিরি সাধি ।
তে অপরাধে মনোভব রে
ঝাপি রহল মন বাধি ॥
ফুল কবরি উরহি লোটায়ল রে
কোরে ধয়ল তুয়া ভানে ।
জ্ঞানদাস কহ তুহু ভালে সমুঝ
কোন করব পরমানে ॥

(Parishad Manuscript No. 201).

(21) বোলইতে সো ধনি বচন না শুন ।
পহিল সম্ভাষে পুছই নাহি পুন ॥
আন পরধাই যাই জব পাশে ।
আন সম্ভাষি আন পরিহাসে ॥
সুন সুন মাধব তুহু সূচতুর ।
কি যে বিধি পরসন্ন কি যে প্রতিকুল ॥
লাজ না জাই কহন পুন বেরি ।
জতনহি নয়ন কোনে নাহি হেরি ॥

রসের আশ্রয় হইয়া রস আশ্বাদিয়া
করহ বৃন্দাবনে বাস ।

স্বরূপ সহিত সদা আরপিভ
স্বরাগে রাখহ আশ ॥

ইহা না করিলে ইহা না জানিলে
সকলি হইবে নাশ ।

না হইবে সাধন না হইবে ভজন
না হইবে ব্রজেতে বাস ॥

জে জন কখন না জানে মরম
সে জন ভজিতে নারে ।

জানিয়া গুনিয়া গ্রহণ করিয়া
সে কেনে সাধন করে ॥

অতএ রসিক পাইয়াছিল অনেক
ভাগ্যের ফলেতে সঙ্গ ।

জ্ঞানদাস কহে জনমে জনমে
এ রসে না দিহ ভঙ্গ ॥

(Parishad Manuscript No. 2416).

(27) নবমীক শেষ দশা দেখি সহচরি
চললহ মাথুর যাহ ।

দূর সঙ্গে হরি দূতি বদন হেরি
নিকটে আওল সো নাহ ॥

এ দূতি কহ কহ কুশল বিশেষ ।

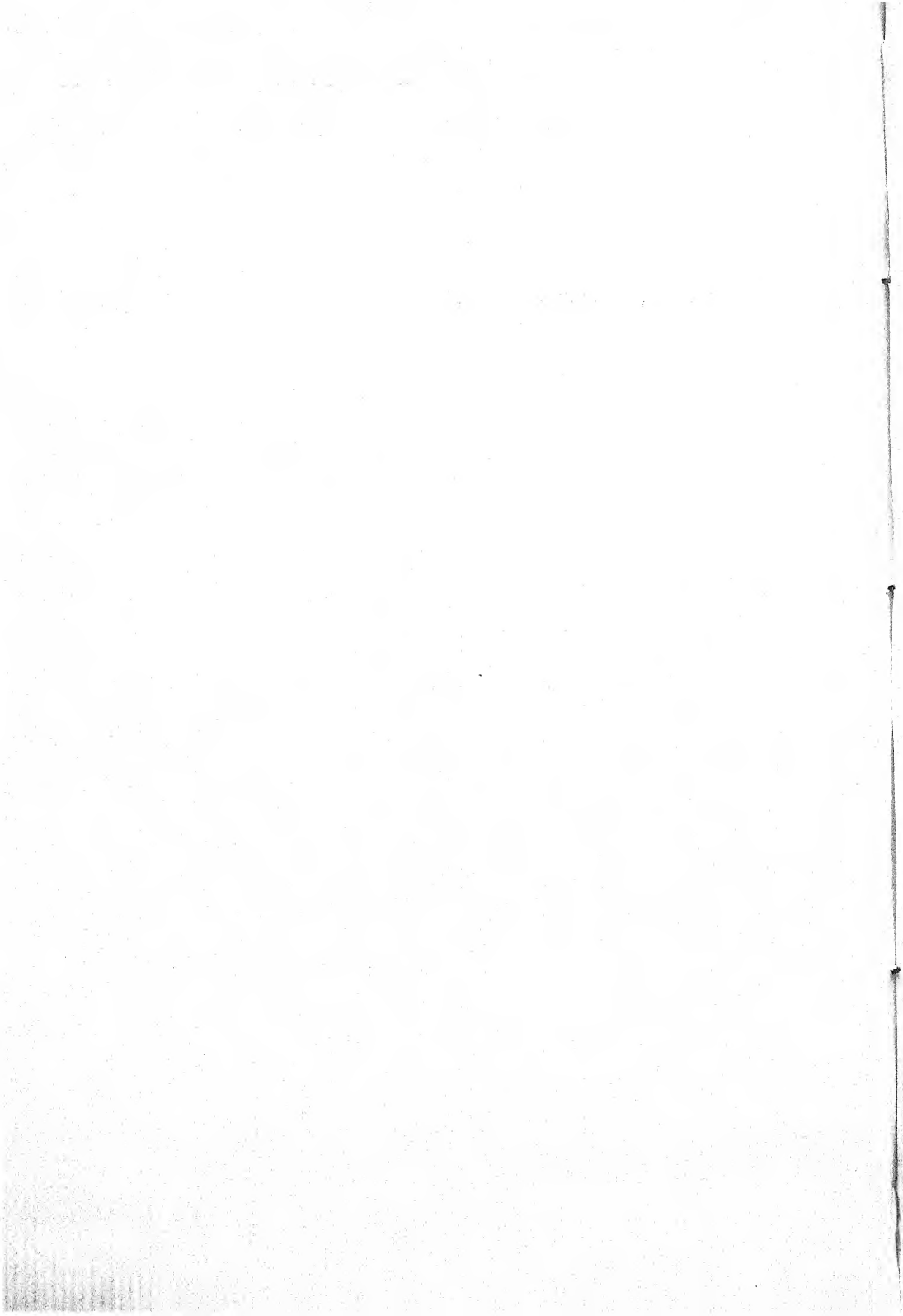
তাজি ব্রজপুরী কাঁহে তুহু স্তনরি
আয়লি মধুপুর দেশ ॥

দূতি কহয়ে হরি সো বর নাগরী
হোয়ত বহুত নিদান ।

তাকর শেষ দশা দেখি আয়ল
গুন বরনাগর কান ॥

তাই এক রমনি কিশলয় দল আনি
যতনহি করত বাতাস ।
জ্ঞানদাস ভণ চেতনা না হয় পূণ
খরতর বহুত হতাশ ॥

("Padāmṛtasindhu", a manuscript in the possession of Dr. D. C. Sen).



Namo Buddhāya.

VUTTODAYA.

PAṬHAMO PARICCHEDO.

FIRST CHAPTER.

1. Namatthu janasantāna—tamasantānabhedino,
Dhammujjalantarucino—Munindodātarocino.

Obeisance to the Great Sage who, as the moon breaks the darkness with its rays, breaks the mass of ignorance with his brilliant Dharma.

2. Piṅgalācariyādihi—chandaṃ yamuditāṃ purā,
Suddhamāgadhikānaṃ taṃ—na sādheti yaticchitaṃ.

The Chanda (or Prosody) compiled by Piṅgalācariya and others in olden times does not serve the purpose of those who know only Suddhamāgadhī.¹

3. Tato Māgadhabhāsāya—mattavaṇṇavibhedanaṃ,
Lakkhalakkhaṇasaṃyuttaṃ—pasannatthapadakkamaṃ.
4. Idam Vuttodayaṃ nāma-lokiyacchandaniṣṣitaṃ,
Ārabhiissamahāṃdāni-tesaṃ sukhavibuddhiyā.

Therefore, to make it easy for them to understand (the Chanda) I shall begin in Māgadhabhāsā¹ this (book) named Vuttodaya which concerns only Lokiyacchanda (*i.e.*, popular Prosody as opposed to the Vedic Prosody, etc.), and which includes within it both Mattābheda and Vaṇṇabheda (*i.e.*, the methods of composing lines both according to Mattās and according to letters).

¹ Suddhamāgadhī or Māgadhī is another name for Pāli.

N.B.—(1) “Lokiyacchanda” means the Prosody that is used in general composition as distinguished from that which is used in the Vedas and in the Tipiṭaka Pāli.

(2) “Mattāvannaṇvibhedanaṃ.” This indicates that there are two kinds of Vuttas or metres, namely, Mattāvutta and Vannaṇvutta. Of them Mattāvutta means those metres which depend on the number of Mattās,¹ and Vannaṇvutta means those metres which are guided by the number of Vannaṇas.¹

(3) “Lakkhalakkhaṇasamyuttam.” We shall find afterwards that the verse which defines a particular metre is itself composed in the same metre. In other words, the same verse is the formula and example.

5. Sabbaglāmnādigalahu—bhyā majjhantagurū jaṣā,
Majjhantala ratetaṭṭha—gaṇa go garu lo lahu.

The Garu² (*i.e.*, the long vowel, or even the short vowel that precedes a conjunct consonant or a Niggahita) is called “Ga,” and the Lahu² (*i.e.*, the short vowel) is called “La.” There are then eight Gaṇas (or feet composed of these Gurus and Laghus), namely, those which consist wholly of ‘Ga’ and ‘La’ are known as ‘Ma’ and ‘Na’ respectively, those which have ‘Ga’ and ‘La’ at the beginning are known as ‘Bha’ and ‘Ya’ respectively, those which have Guru in the middle and at the end are known as ‘Jha’ and ‘Sa’ respectively, and those which have ‘La’ at the middle and at the end are known as ‘Ra’ and ‘Ta’ respectively.

N.B.—(1) Lahu (or Laghu) and Garu (or Guru) are not synonymous with Rassa and Dīgha. All the Laghus are Rassas but all the Rassas are not Laghus as the Rassas that are followed by a conjunct consonant or a Niggahita (*i.e.*, Anuswāra) are taken as Gurus.

(2) Gaṇa literally means a collection. It is used in this

¹ Mattā is the time that we take in pronouncing a short vowel, and Vanna means a letter.

² The terms Guru and Laghu are also used as Garu and Lahu in Pāli.

book technically to mean a collection of three letters. This is the biggest unit of measurement of a line in Vāṇavutta. This is similar to the word 'Foot' in English prosody. Here these Gaṇas are eight in number, namely, Maṇa, Naṇa, Bhagaṇa, Yaṇa, Jaṇa, Saṇa, Raṇa and Taṇa. Among these, Maṇa has three Gurus, as ˘ ˘ ˘; Naṇa has three Laghus, as - - -; Bhagaṇa has a Guru at the beginning followed by two Laghus as ˘ - -; Jaṇa has a Guru in the middle with a Laghu on each side, as - ˘ -; Saṇa has a Guru at the end preceded by two Laghus, as - - ˘; Raṇa has a Laghu in the middle with a Guru on each side, as ˘ - ˘; and Taṇa has a Laghu at the end preceded by two Gurus, as ˘ ˘ -.

The following Sanskrit verse, if committed to memory, will be very useful in remembering the arrangement of the Laghus and Gurus in different Gaṇas :

Mastriguruṣṭrilaghuṣca nakāro,
Bhādiguruḥ punarādilaghuryaḥ,
Jo gurumadhyagato ra lamadhyāḥ,
Sontaguruḥ kathitontalaghustāḥ.

The terms 'Ma,' 'Na,' etc., are sometimes used with the word 'Gaṇa' such as Maṇa, Naṇa, Bhagaṇa, etc. But mostly they are used by themselves as in "Mo mo go go Vijjummālā."

6. Bhajasā sabbagalāhū—pañcime saṇṭhitā gaṇā,
Ariyādimhi viññeyyā—gaṇo idha catukkallo.

It should be known that only the following five Gaṇas, namely, Bha, Ja, Sa, Sabbaguru, and Sabbalahu, occur in Ariyā and such other metres. Here (*i.e.*, in Ariyā, etc.) a Gaṇa has only four Kalās (*i.e.*, Mattās).

N.B.—(1) Kalā is another name for Mattā. Now, Mattā is the time that we take in making one wink, and this is also the time taken in pronouncing a short vowel. Thus a short vowel or a Laghu has only one Mattā, and a long vowel or

a Guru has two Mattās. Thus a Gaṇa in Ariyā may be of one of the following forms :—

— — — ; — — — ; — — — ; — — — ; — — — .

(2) It is to be noted that the term Gaṇa has been used here to indicate the collection of four Mattās, and not three letters as above.

7. Saṃyogādī ca dīgho ca—niggahītaparo ca yo,
Guru vaṅko padanto vā—rassoñño mattiko lujū.

The vowel which stands before a conjunct consonant, or that which is long, or that which is followed by a Niggahīta (*i.e.*, Anusvāra), is called Guru and it is indicated by a curved line. The vowel that stands at the end of a line is also sometimes taken as Guru. The short vowel which has only one Mattā is (known as) La (or Laghu) and it is represented by a straight line.

N.B.—In English prosody the accented vowel is generally indicated by a straight line and the unaccented one by a curved line. But here we find that a contrary method is adopted.

8. Pare pādādisaṃyoge—yo pubbo garuvakkharo,
Lahū sa kvaci viññeyyo—tadudāharaṇaṃ yathā.

The vowel that has become Garu by standing before a conjunct consonant which stands at the beginning of a line, is sometimes taken as Lahu. The following is an example of it :—

(This means that the short vowel that stands at the end of a line is sometimes regarded as a Laghu even if there be a conjunct consonant at the beginning of the next line.)

“9. Dassanarasānubhavane—nibaddhagedhā jinassayaṃ janatā,
Vimhayajanani saññata—kriyā nu kaṃ nānuranjayati.”

Here, in the third line the short vowel ‘a’ of ‘t’ of the word ‘saññata’ stands before the conjunct consonant ‘kri’ of the word “kriyā” in the following line. It should

therefore, be taken as a Guru according to the instruction given in the verse No. 7. But it is taken here as a Laghu. Otherwise, the line which is of an Ariyā is not correct metrically (*vide* verse 1, Ch. 2).

10. Viññeyyā lokato Saññā—samudoturasādinam,
Pādo ñeyyo catutthamso—padacchedo yatibbhawe.

From the world (*i.e.*, from the popular usage) should be learned the numerical value attached to the words Samudda, Utu, Rasa, etc. A Pāda is one fourth part of a verse, and a Yati is the breaking of the pāda.

N.B.—(1) In Pāli and Sanskrit literature numbers are often indicated by some words of numerical significance. Thus, Canda indicates one, because there is only one Canda, *i.e.*, moon; Nayana indicates two as there are two Nayanas, *i.e.*, eyes. This method is known as Bhūtasankhyāvidhi.

(2) The terms Pāda and Pada are used here synonymously. Both are meant to indicate a line in a verse. Verses are generally composed of four lines and each of these is called a Pāda.

(3) Yati is what is called 'Pause' or caesura in English prosody.

11. Samamaddhasamam vutam—visamam cāparam tathā,
Samā lakkhanato pādā—cattaro yassa tam samam.

12. Yassantimena dutiyo—tatiyenādimo samo,
Tadaddhasamamaññantu-bhinna-lakkhaṇamādikaṃ.

The Vutta (*i.e.*, Vannavutta) is of three kinds, namely, Sama, Addhasama and Visama. If the four Pādas or lines of a Vutta are similar in form that Vutta is called Sama, *i.e.*, Regular. If the second Pāda of any Vutta is similar in form to the last, and the first to the third, it is called Addhasama, *i.e.*, Semi-Regular. The other Vutta in which the lines are not similar to one another is called Visama, *i.e.*, Irregular.

N. B.—Here the word "Vutta" refers to the Verse composed in a particular Vutta.

13. Pādamekakkharārabbha—yāva chabbīsatakkharam,
Bhave pādehi taṃ chandaṃ—nānānāmoditaṃ tato;

14. Daṇḍakā Caṇḍavuṭṭhyādi—pādehi chahi tīhi tu,
Gāthāti ca paratthevaṃ—chandosaññā pakāsitā.

There are Chandas varying from the line containing one letter up to the line containing twenty-six letters known by different names; and then after that (*i.e.*, after the Chanda containing twenty-six letters) there are Daṇḍakas such as Caṇḍavuṭṭhi, etc. The verses with either six or three lines are known as Gāthās. The names of the Chandas are thus given in other works (*i.e.*, in Sanskrit Prosody).

N. B.—The names of the Chandas are not given in serial order in the Vuttodaya. They are given below in their Pāli and the corresponding Sanskrit forms along with the number of Vuttas (*i.e.*, Metres) which each of them contains:

Number of letters.	NAME OF THE CHANDA.		Number of Vuttas.
	Pāli	Sanskrit	
1	Vuttā	Uktā	2
2	Accuttā	Atyuktā	4
3	Majjhā	Madhyā	8
4	Paṭiṭṭhā	Pratiṣṭhā	16
5	Suppaṭiṭṭhā	Supraṭiṣṭhā	32
6	Gāyattī	Gāyatri	64
7	Uṇhi	Uṣṇih	128
8	Anuṭṭhubha	Anuṣṭup	256
9	Brahati	Bṛihati	512
10	Panti	Paṅkti	1024
11	Tuṭṭhubha	Triṣṭup	2048
12	Jagati	Jagati	4096
13	Atijagati	Atijagati	8192
14	Sakkari	Sakvari	16384
15	Atisakkari	Atisakvari	32768
16	Aṭṭhi	Aṣṭi	65536
17	Accatṭhi	Atyaṣṭi	131072
18	Dhiti	Dhṛti	262144
19	Atidhiti	Atidhṛti	524288
20	Kati	Kṛti	1048576
21	Pakati	Prakṛti	2097152
22	Ākati	Ākṛti	4194304
23	Vikati	Vikṛti	8388608
24	Saṅkati	Saṅkṛti	16777216
25	Atikati	Atikṛti	33554432
26	Ukkati	Utkṛti	67108864

15. Anantaroditaṃ cāñña—metarṃ sāmāñña nāmato,
Gāthā micceva niddiṭṭhā—munindavacane pana.

But in the Buddhist literature all of these (*i.e.*, the Vanna-vuttas given above) and also others (*i.e.*, Mattāvuttas such as Ariyā, etc., which will be given below) are known by the general name of Gāthā.

N. B.—*Chanda and Vutta*. Chanda determines the number of letters. Vutta determines the arrangement of Gurus and Laghus. In one Chanda there are many Vuttas. Vuttā, Acuttā, etc., are Chandas, and Tanumajjhā, Kumāralalita, etc., are Vuttas.

16. Visesanāmato kiñci—gahetvā sabbatocitaṃ,
Dassayissāmahaṃ tvettha—nāmānāvibhavissare.

Here I shall show in their special names some of those which are quite suitable (for general use, or for the use in Pāli literature), and these names will appear afterwards (in their appropriate places).

*Iti Vuttodaye saññāparibhāsāniddeso nāma Paṭhamo
paricchedo.*

Here ends the first Chapter of Vuttodaya dealing with names and signs.

DUTIYO PARICCHEDO.

SECOND CHAPTER.

ARIYĀ JĀTAYO.

The Ariyā Group.

1. Chatthokhilalahu jo vā—gayutāññechaggaṇā na jo
visame,
Ariyāyantaddhe lo—chaṭṭhonte go gaṇā chaññe.

In Ariyā the sixth (gaṇa) will be of all-Laghu or Ja (*i.e.*, Jagana). There are six other Gaṇas with a Ga (*i.e.*, Garu). There will be no Ja in odd places. In the last half the sixth (Gaṇa) will be of only a single La (*i.e.*, Laghu) and at the end there will be a Ga. And there are six other Gaṇas.

Explanation.

Ariyā (Sk. āryā) is divided into two halves or rather into two parts. Each of these parts contains seven Gaṇas and a Guru, the Guru being always at the end. In the first part the sixth Gaṇa is of four Laghus or a Jagana. And in the second part the sixth Gaṇa contains only a single Laghu. In odd places in both the parts there should be no Jagana.

The stanza given above is itself an example of Ariyā. Its Gurulaghu table can be drawn up as follows:—

—, — — —, — —, — —, — —, — —, — —, —;
— —, — —, — —, — —, — —, — —, — —, —.

N. B.—In Ariyā a Gaṇa has only four Mattās. See Stanza 6, Ch. I.

2. Paṭhamaddhe chaṭṭho ce—sabbalahetthādilahuni bhavati yati.

Tapparakontepi sace—carimepi bhavati catutthonte.

In the first half of Ariyā if the sixth Gaṇa contains a Sabbalahugana (*i.e.*, if the sixth Gaṇa is of four Laghus), the Yati (*i.e.*, the pause) will fall on the first Laghu of that Gaṇa. But if the sixth Gaṇa has a Sabbalahugana following it (*i.e.*, if the seventh is a Sabbalahugana) then the Yati will fall on the last letter (of the sixth Gaṇa).

Again, in the second half if the fourth Gaṇa has a Sabbalahugana following it (*i.e.*, if the fifth is a Sabbalahugana) the Yati will fall on the last of the fifth Gaṇa.

(On the strength of the particle "Api" occurring in the verse, there can be a pause in the first letter of the fifth Gana and this is the pause recognised by the Sanskrit prosodists.)

E.g.,

$- - \cup$, $\cup \cup$, $\cup \cup$, $\cup - -$, $\cup \cup$, $- - - -$, $- - - -$, \cup ;
 $\cup - -$, $\cup \cup$, $- - \cup$, $- - \cup$, $- - - -$, $\cup \cup$, \cup .

In the above table the places marked by (,) are the places of the pause.

3. Ariyāsāmaññaṃce—pubboditalakkhaṇaṃ bhava yassā,
 Ādimamatha pādayugam—yassātyaṃsehi sā Pathyā.

If any stanza has all the characteristics of an Ariyā given above, and in addition to that the first Pāda of each half ends in three Ganas it is called Pathyā.

E.g.,

[illegible]

Here we find that the first parts of both the halves end in the third Gana.

4. Yattha gaṇattayamullaṅghiyo—bhayaṭṭhādimo bhava vipulā.

If in a stanza of Ariyā the first parts of both the halves end somewhere after three Gaṇas it is called Vipulā.

E.g.,

— — —, — — —, — — —, — — —, — — —, — — —, — — —, — — —.

This is only one part of Vipulā. Here we find that the first portion of this part ends in the middle of the fourth Gaṇa and not at the end of the third Gaṇa as in Pathyā.

5. Gurumajjhago jakāro—catutthako dutiyako Capalā.

If the second and the fourth Gaṇa of each of the two halves of Ariyā is a Jagāṇa and stands between two Gurus, it is called Capalā.

— — —, — — —² — — —, — — —, — — —⁴ — — —, — — —, — — —, — — —.

Here the 2nd and the 4th Gaṇas are Jagāṇas and each of them stands between two Gurus.

6. Capalāgatam khilam ce—dalādimam lakkhaṇam bhajati yassā,

Pathyālakkaṇamaññaṁ—Mukhacapalā nāma sā bhavati.

If the first half of a stanza has all the characteristics of the Capalā and the other (*i.e.*, the second half) has the characteristics of the Pathyā, it is called Mukhacapalā.

E.g.,

— — —, — — —, — — —, — — —, — — —, — — —, — — —, — — —;
— — —, — — —, — — —, — — —, — — —, — — —, — — —, — — —.

Here we find that the first part has the characteristics of Capalā, and the second part those of Pathyā.

Here both the lines are composed in the form of the first line of Ariyā.

2. Ariyāyaṃ dutiyaddhe—gaditākhilalakkhaṇaṃ yaṃ taṃ,
Bhavati dalesubhayesupi—yadi yassā sāyamupagīti.

If all the characteristics of the second half of the Ariyā are found in both the halves of a stanza it is called Upagīti.

E.g.,

-- ∪, ∪ --, ∪ ∪, -- ∪, -- ∪, --, ∪ ∪, ∪;
----, ∪ --, ∪ --, -- ∪, ∪ ∪, --, -- ∪, ∪.

Here both the lines bear the characteristics of the second line of Ariyā.

3. Ariyāyaddhadvitayaṃ—pubboditalakkaṇūpetam;
Vipariyāyenābhihitam—yassā sambhavati ceha Upagīti.

If in a stanza the two halves of Ariyā of the above given characteristics are placed inversely it is called Upagīti.

E.g.,

-- ∪, ∪ ∪, -- ∪, ∪ ∪, -- ∪, --, ∪ ∪, ∪;
----, ∪ ∪, -- ∪, ∪ ∪, ∪ --, -- ∪, -- ∪, ∪.

Here we find that the first line of the Ariyā is the second line in this stanza, and the second line of the Ariyā is the first line here.

4. Ariyāpubbaddham yadi-gurunekenādhikena nidhane yuttam,
Yadi pubbaddhasamānam—dalamitaramcoditāyamariyāgīti.

If the first part of the Ariyā gets one more Guru at the end (and stands as the first line of stanza), and the second line is just like the line so made, in other words, if the first part

of Ariyā with an additional Guru at the end stands in both the lines of a stanza) it is called Ariyāgīti.

E.g.,

-- ∪, ∪ ∪, ∪ --, -- ∪, ∪ ∪, - ∪ -, -- ∪, ∪, ∪;
 -- ∪, ∪ --, ∪ ∪, ----, ∪ ∪, - ∪ -, -- ∪, ∪, ∪.

Here, but for the additional Guru, each of the two lines are just like the first line of Ariyā.

Iti Gītiyatayo.

Thus ends the Gīti Group.

VETĀLĪ JĀTAYO.

The Vetālī Group.

1. Visame cha siyurm kalā mukhe-sametattḥa ralaḡā tatopari,
 Vetāliyam tamuccate—lahuchakkaṁ na nirantaram same.

If in a verse in the odd lines (*i.e.*, in the first and third lines) there are six Mattās at the beginning, and in the even lines (*i.e.*, in the second and the fourth lines) there are eight Mattās at the beginning, and both are followed by a Ragaṇa and a Laghu and a Guru, it is called Vetāliya. Here in the even lines there should not be six Laghus consecutively (Sk. Vaitāliya).

E.g.,

6	R.	L.	G.	8	R.	L.	G.
-- ∪ --,	∪ -- ∪,	- ∪	∪ ∪ --,	∪ -- ∪,	- ∪,	- ∪,	;
6	R.	L.	G.	8	R.	L.	G.
∪ ∪ ∪,	∪ -- ∪,	- ∪,	-- ∪ ∪ --,	∪ -- ∪,	- ∪,	- ∪,	.

N.B.—(1) Here the stanza is broken into four lines.

(2) The Vṛttaratnākara lays down that these Laghus should not be made into Gurus by mixing a Laghu of an odd place with a Laghu of a preceding even place. But the Laghu of an odd place can be mixed with a Laghu of the following even place and made into a Guru. For instance, the first and second Laghus can be made into a Guru, but the second and the third cannot be.

2. Vetāliyopamaṁ mukhe taṁ—Opacchandāsikaṁ rayāyadante.

In a verse if the beginning of the lines is like that in Vetāliya, but at the end there be a Ragaṇa and a Yagaṇa (instead of a Ragaṇa, a Laghu and a Guru) it is called Opacchandāsika (Sk. Aupacchandāsika).

E.g.,

6 R Y 8 R Y

— — — , — — — , — — — , — — — — — , — — — , — — — .

3. Āpātalikā kathiteyaṁ—bhaggānte yaḍi pubbamivaññaṁ.

If in a verse the beginnings of the lines are as given above, but at the end there are a Bhagaṇa and two Gurus it is called Āpātalikā.

E.g.,

6 Bha. G G 8 Bha. G G

— — — — — , — — — — — , — — — — — ; — — — — — , — — — — — , — — — — — .

4. Yadādito Dakkhiṇantika—Thitettapādesākhilesu jo.

If there be a Jagagaṇa at the beginning of each line that kind of Vetāliya is called Dakkhiṇantika (Sk. Dakṣiṇantika).

N.B.—This is only another form of Vetāliya where the first six Mattās are arranged so as to form a Jagāṇa, at the beginning.

E.g.,

J	R	L	G	J	R	L	G
- - - - -				- - - - -			
6				8			

5. Udiccavuttitī vuccate—jo cādo visamesu saṇḥito.

If the Jagāṇa stands at the beginning of the odd lines only that kind of Vetāliya is called Udiccavutti (Sk. Udiccavṛtti).

E.g.,

J	R	L	G	8	R	L	G
- - - - -				- - - - -			
6							

6. Pubbattha samesu ce gajā—Paccavuttiruditeti saṇḥitā

If in the even lines there are a Guru and a Jagāṇa at the beginning that Vetāliya is called Paccavutti (Sk. Prācya-vṛtti).

E.g.,

6	R	L	G	J	R	L	G
- - - - -				- - - - -			

7. Samāsamaṭṭrādinaṃ samā—saṃyutā bhavati taṃ Pavattakaṃ.

If the even and the odd lines of the above two, *i.e.*, Paccavutti and Udiccavutti, are respectively made the even and the odd lines of a verse it is called Pavattaka (Sk. Pravṛttaka).

E.g.,

Udiccavutti

Paccavutti

- - - - , - - - - , - , - , - - - - , - - - - , - , - .

Here we find that the first part is similar to Udiccavutti and the second part to Paccavutti. Pavattaka is thus a mixture of Udiccavutti and Paccavutti.

N.B.—From Opacchandāsika up to the Paccavutti the lines given must be doubled to make a complete verse.

8. Assa yā samakata' parantikā.

A verse made of the even lines of this (Pavattaka) is called Aparantikā.

This means that if in a verse each of the four lines is similar to one of the even lines of Pavattaka (and hence also of Paccavutti) it is called Aparantikā (Sk. Aparāntikā).

E.g.,

- - - - , - - - - , - - - - ; - - - - , - - - - ;
 - - - - , - - - - , - - - - ; - - - - , - - - - ;
 - - - - , - - - - , - - - - ; - - - - , - - - - ;
 - - - - , - - - - , - - - - ; - - - - , - - - - .

9. Tadaññajā Cārubhāsini.

If a verse is composed of lines other than the even lines (of Pavattaka) it is called Cārubhāsini.

This means that if in a verse each of the four lines is similar to one of the odd lines of Pavattaka (and hence of Udiccavutti) it is called Cārubhāsini.

E.g.,

- - - - , - - - - , - - - - .
 - - - - , - - - - , - - - - .
 - - - - , - - - - , - - - - .
 - - - - , - - - - , - - - - .

Iti Vetālījātayo.

Thus ends the Vetālī Group.

3. Jonlāthavāṇṇavā Visiloko.

If in a line there is a Jagāṇa or a Nagāṇa along with a Laghu (*i.e.*, four Laghus) after four Mattās it is called Visiloka (Sk. Visloka).

E.g.,

J
 — — , — — — , — — — — . (Or a similar form).

If a Nagāṇa along with a Laghu is put instead of the Jagāṇa the line stands as follows :

N.L.
 — — , — — — — , — — — — . (Or in some similar form).

4. Tadvayato Vānavāsikākhyā.

If there is a Jagāṇa or a Nagāṇa followed by a Laghu after eight Mattās it is called Vānavāsikā.

E.g.,

J
 — — — — — — — — , — — — — , — — .

Here in the place of the Jagāṇa we can insert a Nagāṇa and a Laghu.

E.g.,

— — — — — — — — , — — — — , — — .

5. Pañcatṭhanavasū yadi lo Citrā¹

If there is a Laghu in the fifth, and eighth and ninth places the metre is called Citrā.¹

E.g.,

— — , — — — — — — — — , — — — — — — — — .

¹ Citrā in some editions.

6. Gallatṭṭahi ce sā Upacitrā.¹

If after eight Mattās there be one Guru and two Laghus (*i.e.*, a Bhagaṇa) the metre is called Upacitrā.¹

E.g.,

— — — — — , — — — , — — — .

7. Yamatītalakkhaṇavisesayuta—Mattāsamādipādābhī-
hitam,

Aniyatavuttaparimāṇasahitam—pathitam janesu Pādā-
kulakam.

The verse that is composed of the lines of Mattāsama and other metres (combinedly), with their abovementioned characteristics, but has no regularity of Vuttas in its lines is popularly called Pādākulaka.

E.g.,

— — — — — — — — — — — ,
— — — — — — — — — — — ,
— — — — — — — — — — — ,
— — — — — — — — — — — .

Now, here the first line is Mattāsamaka as it contains a Laghu in the ninth place and a Guru at the end; or it may be a Visiloka as it has a Jagana after four Mattās; or it may be Citrā as it has a Laghu in the fifth, eighth and ninth places. The second line is Visiloka. The third line is either Mattāsamaka or Vānavāsika. The fourth line is, again, Visiloka. Thus, in this stanza all the various metres mentioned above are mixed and therefore it is a Pādākulaka.

Iti Mattāsamaka Jātayo.

Thus ends the Mattāsamaka Group.

¹ Upacittā in some editions.

TATIYO PARICCHEDO.

THIRD CHAPTER.

Gāyatti (6 letters).

1. *Tyā ce Tanumajjhā*.

If (in each of the four lines of a verse) there is a Tagaṇa along with a Yagaṇa, the metre is called Tanumajjhā (Sk. Tanumadhyā).

E.g.,

— — — / — — — .

N.B.—The Chandas of one, two, three, four and five letters are omitted here apparently because no verses are generally composed in them.

Uṇhi (7 letters).

2. *Kumāralalitā jsgā*.

(The metre which has) a Jagana, Sagana and a Guru, is called Kumāralalitā.

E.g.,

— — — / — — — / — .

Anuṭṭhubha (8 letters).

3. *Citrapadā yadi Bhā gā*.

If there are two Bhagaṇas and two Gurus, the metre is called Citrapadā.

E.g.,

— — / — — / — / — .

4. Mo mo go go vijjummālā.

If there are two Magaṇas and two Gurus, the metre is called Vijjummālā (Sk. Vidyunmālā).

E.g.,

— — — / — — — / — / — .

5. Bhā talagā Mānavakam.

If after a Bhagaṇa there stand a Tagaṇa, a Laghu and a Guru, the metre is called Mānavakam.

E.g.,

— — — / — — — / — / — .

6. Glā Samānikā rajā ca.

If there are a Guru and a Laghu and also a Ragaṇa and a Jagagaṇa it is called Samānikā.

E.g.,

— / — / — — — / — — — ,

7. Pamānikā jarā lagā.

The metre which has a Jagagaṇa and a Ragaṇa and also a Laghu and a Guru is called Pamānikā (Sk. Pramānikā).

E.g.,

— — — / — — — / — / — .

N.B.—This is the converse of the above. Such things are not infrequent.

Brahati (9 letters).

8. Rā nasā yadi Halamukhī.

If after a Ragaṇa there stand a Nagaṇa and a Sagaṇa, the metre is called Halamukhī.

E.g.,

— — — / — — — / — — —

9. Bhujagasusubhatā nā mo.

If there are two Nagaṇas and a Magaṇa, the metre is called Bhujagasusubhatā (Sk. Bhujagaśiśubhṛtā).

E.g.,

— — — / — — — / — — —

Panti (10 letters).

10. Msā jgā Suddhvirāditaṁ mataṁ.

The metre which has a Magaṇa, a Sagaṇa, a Jagaṇa, and a Guru, is called Suddhvirādita (Sk. Suddhvirad).

E.g.,

— — — / — — — / — — — / —

11. Mnā yo go yadi Paṇavo khyāto.

The metre which has a Magaṇa, a Nagaṇa, a Yagaṇa and a Guru is called Paṇava.

E.g.,

— — — / — — — / — — — / —

12. Bhmā sagayuttā Rumnavatī sā.

The metre which has a Bhagaṇa, a Magaṇa, a Sagaṇa and a Guru is called Rumnavatī (Sk. Ruknavatī).

E.g.,

— — — / — — — / — — — / — .

13. Ñeyyā Mattā mabhasagayuttā.

The metre which has a Magaṇa, a Bhagaṇa, a Sagaṇa and a Guru is known as Mattā.

E.g.,

— — — / — — — / — — — / — .

14. Campakamālā ce bhamasā go.

If there are a Bhagaṇa, a Magaṇa, a Sagaṇa and a Guru the metre is called Campakamālā.

E.g.,

— — — / — — — / — — — / — .

N. B.—This is just the same as the Rumnavatī given above. This must, therefore, be a mistake.

15. Narajagehi sā Manoramā.

The metre which contains a Nagaṇa, a Ragaṇa, a Jagaṇa and a Guru is called Manoramā.

E.g.,

— — — / — — — / — — — / — .

16. Ubbhāsakantaṁ ce to marāḷ ca.

If there are a Tagaṇa, a Magaṇa, a Ragaṇa and a Laghu the metre is called Ubbhāsaka.

E.g.,

— — — / — — — / — — — / —

(A metre corresponding to this is not found in the Vṛttaratnākara. The Sanskrit form of the name would be Udbhāṣaka).

Tuṭṭhubha (11 letters).

17. Tjā jgā garunāyamupaṭṭhitā sā.

The metre which has a Tagaṇa, and two Jagaṇas and also two Gurus is called Upaṭṭhitā (Sk. Upaṣṭhitā).

E.g.,

— — — / — — — / — — — / — — — / — — — .

18. Indādikā tā vajirā jagā go.

If there are two Tagaṇas and a Jagaṇa and two Gurus the metre is called Indavajirā (Sk. Indravajrā).

E.g.,

— — — / — — — / — — — / — — — / — — — .

19. Upādikā sāva jatā jagā go.

But the metre which has a Jagaṇa, a Tagaṇa, a Jagaṇa and two Gurus is called Upindavajirā (Sk. Upendravajrā).

E.g.,

— — — / — — — / — — — / — — — / — — — .

20. Anantarodīritalakṣhaṇā ce.

Pādā vimissā Upajātayo tā ;

Evam kiraññāsupi missitāsu,

Vadanti jātisvidameva nāma.

If the lines having the characteristics mentioned above are mixed in a verse it is called Upajāti. In the same way

if other kinds of Vuttas are mixed in verses they are also known by the same name (*i.e.*, Upajāti).

In the above verse we find the first and the last lines are of Upindavajirā, and the second and the third lines are of Indavajirā. In the same way we may find instances where Vamsatṭha and Indravamsa, and Vasantatilakā and Indavajirā are mixed up.

21. Sajajā lagā gaditā Sumukhī.

If there are a Sagaṇa and two Jagaṇas and also a Laghu and a Guru the metre is called Sumukhī.

E.g.,

— — ∪ / — ∪ — / — ∪ — / — / ∪ .

N. B.—In the Vṛttaratnākara we find that it is “Najajalaga,” that makes Sumukhi, thus substituting a Nagaṇa for the Sagaṇa of this book.

22. Dodhaka micchati ce bhabhabhā gā.

If there are three Bhagaṇas and two Gurus the metre is called Dodhaka.

E.g.,

∪ — — / ∪ — — / ∪ — — / ∪ / ∪ .

23. Vedassehi mtātagāg Sālīni sā.

If there are a Magaṇa, two Tagaṇas and two Gurus, and if there is a pause after four and seven letters respectively the metre is called Sālīni (Sk. Śālīni).

E.g.,

∪ / ∪ ∪ — / ∪ ∪ — / ∪ / ∪ .

Veda = 4; Assa = 7.

24. Vātummī sā yati Sāmbhā tagā go.

If there are a Magaṇa, a Bhagaṇa, a Tagaṇa and two Gurus and the same pause (as in the above) the metre is called Vātummī (Sk. Vātermī).

E.g.,

— — — / — — — / — — — / — / — .

25. Bhā tanagā go sura Sasirī sā.

If after a Bhagaṇa there are Tagaṇanagaṇas and two Gurus and if there is pause after five and six letters respectively the metre is called Sirī (Sk. Srī or Strī.) It is also called Māuktikamālā.

E.g.,

— — — / — — — / — — — / — / — .

26. Ro narā idha Rathoddhata lagā.

If there are a Ragaṇa, a Nagaṇa, a Ragaṇa, and also a Laghu and a Guru, the metre is called Rathoddhata.

E.g.,

— — — / — — — / — — — / — / — .

27. Svāgateti ranabhā gurukā dve.

If there are a Ragaṇa, a Nagaṇa, a Bhagaṇa and two Gurus the metre is called Svāgatā.

E.g.

— — — / — — — / — — — / — / — .

28. Nanaralahugurūhi Bhaddikā.

By two Nagaṇas and a Ragaṇa and also a Laghu and a Guru we get Bhaddikā (Sk. Bhadrīkā, Subhadrīkā or Candrikā).

E.g., — — — / — — — / ~ — ~ / — / ~ .

Jagati (12 letters).

29. Vadanti Vamsatṭhamidaṁ jatā jarā.

When there are a Jagāṇa, a Tagāṇa, a Jagāṇa and a Ragaṇa the metre is called Vamsatṭha (Sk. Vamśastha).

— ~ — / ~ ~ — / — ~ — / ~ — ~ .

30. Sā Indavamśā khalu yattha tā jarā.

If there are two Tagāṇas and a Jagāṇa and a Ragaṇa the metre is called Indavamśā. (Sk. Indravamśā).

E.g.,

~ ~ — / ~ ~ — / — ~ — / ~ — ~ .

31. Idha totakamambudhisehi mitaṁ.

If a line is measured by four Sagaṇas (i.e., if it contains four Sagaṇas) it is called Totaka.

E.g.,

— — ~ / — — ~ / — — ~ / — — ~ .

(Ambudhi=Samudda=4.)

32. Dutavilambitamāha nabhā bharā.

When there are a Nagaṇa, two Bhagaṇas and a Ragaṇa the metre is called Dutavilambita (Sk. Drutavilambita.)

E.g., — — — / ~ — — / ~ — — / ~ — ~ .

33. Vasuyugavirati nāmyā Puṭoyam.

If in a line there is a pause after eight, and then after four letters, and if the line contains two Nagaṇas, a Magaṇa and a Yagaṇa, the metre is called Puṭa.

E.g.,

— — — / — — — / ~ ~ ~ / — ~ ~ .

(Vasu=8. Yuga=4. Virati=Yati=Pause.)

34. Nayasahitā nyā Kusumavicittā.

If there are a Nagaṇa and a Yagaṇa joined with another Nagaṇa and a Yagaṇa the metre is called Kusumavicittā (Sk. Kusumavicitrā).

E.g.,

— — — / — ~ ~ / — — — / — ~ ~ .

35. Bhujāṅgappayātam bhavē vedayehi.

If there are four Yagaṇas there will be Bhujāṅgappayāta (Sk. Bhujāṅgaprayāta.)

E.g.,

— ~ ~ / — ~ ~ / — ~ ~ / — ~ ~ .

(Veda=4.)

36. Nabhajarehi bhavatip Piyāṁvadā.

If there are a Nagaṇa, a Bhagaṇa, a Jagaṇa and a Ragaṇa the metre is called Piyāṁvadā (Sk. Priyāṁvadā).

E.g.,

— — — / ~ — — / — ~ — / ~ — ~ .

37. Vuttā sudhihi Lalitā tabhā jarā.

If there are a Tagaṇa, a Bhagaṇa, a Jagaṇa and a Ragaṇa the metre is called Lalitā by the wise.

E.g.,

— — — / — — — / — — — / — — — .

38. Pamitakkharā sajasasehuditā.

If there are a Sagaṇa and a Jagaṇa and again two Sagaṇas it is called Pamitakkharā (Sk. Pramitākṣarā).

E.g.,

— — — / — — — / — — — / — — — .

39. Nanabharasahitābhihitujjalā.

If there are two Nagaṇas and a Bhagaṇa and a Ragaṇa the metre is called Ujjalā (Sk. Ujvalā).

— — — / — — — / — — — / — — — .

40. Pancassacchinnā Vessadevī mamā yā.

If a line is divided by five and seven letters, and if it contains two Magaṇas and two Yagaṇas the metre is called Vessadevī (Sk. Vaisvadevī.)

E.g.,

— — — / — — — / — — — / — — — .

(Assa=7.)

41. Vadatihi Tāmarasaṁ najajā yo.

If there are a Nagaṇa, two Jagaṇas and a Yagaṇa the metre is called Tāmarasa.

E.g.,

— — — / — — — / — — — / — — — .

42. Kamalāti ñeyyā sayasehi yo ve.

If there be a Yagaṇa after a Sagaṇa, a Yagaṇa and a Sagaṇa, it is called Kamalā.

E.g.,

— — — / — — — / — — — / — — — .

This is not to be found in the Vṛttaratnākara.

Atijagati (13 letters).

43. Mnā jṛā go tidasayatippahāsini sā.

If there are a Magaṇa, a Nagaṇa, a Jagagaṇa, a Ragaṇa, and a Guru, and if there are pauses after three and ten letters, it is called Pahāsini (Sk. Praharṣaṇī or Praharṣiṇī.)

E.g.,

— — — / — — — / — — — / — — — / — .

44. Catuggahehiha Rucirā jabhā saajā.

If there are pauses after four and nine letters, and if there are a Jagagaṇa, a Bhagaṇa, a Sagaṇa, a Jagagaṇa, and a Guru it is called Rucirā.

E.g.,

— — — / — — — / — — — / — — — / — .

(Gaha = 9.)

Sakkarī (14 letters).

45. Nanarasalahugā sarehi' Parājita.¹

¹ Sarehaparājita is better.

If there are two Nagaṇas and a Ragaṇa, a Sagaṇa, a Laghu and a Guru, and if there is a pause after seven letters, the metre is called Aparājita.

E.g.,

— — — / — — — / ∪ — ∪ / — — ∪ / — / ∪ .

(Sara = 7.)

46. Nanabhanalagitippaharaṇakalikā.

If there are two Nagaṇas, a Bhagaṇa, a Nagaṇa, a Laghu and a Guru, the metre is called Paharaṇakalikā (Sk. Praharaṇakalikā).

E.g.,

— — — / — — — / ∪ — — / — — — / — / ∪ .

47. Vuttā Vasantatilakā tabhajā jagā go.

If there are a Tagaṇa, a Bhagaṇa, and two Jagaṇas and also two Gurus the metre is called Vasantatilakā.

E.g.,

∪ ∪ — / ∪ — — / — ∪ — / — ∪ — / ∪ / ∪ .

Atisakkarī (15 letters).

48. Dvihatahayalaghurathagiti Sasikalā.

If there are fourteen Laghus and a Guru the metre is called Sasikalā.

— — — — — — — — — — — — — — — — ∪ .

(Dvihata = multiplied by two. Haya = 7.)

49. Vasuhayayatiriha Maṇigaṇanikaro.

In the Sasikalā if there is a pause after eight and again after seven letters it is called Maṇigaṇanikara (Sk. Maṇigaṇanikara or Maṇigaṇakirāṇa).

E.g.,

— — — — — , — — — — — .

50. Nanamayayayutāyaṁ Mālinī bhogisihi.

If there are two Nagaṇas, one Magaṇa and two Yagaṇas, and then pauses after eight and seven letters respectively the metre is called Mālinī.

E.g.,

— — — / — — — / ~ ~ ~ / — ~ ~ / — ~ ~ .

(Bhogi=8. Isi=7.)

51. Bhavati najā bhajā rasahitā Pabhaddakam.

If there are a Nagaṇa, a Jagaṇa, a Bhagaṇa, a Jagaṇa and a Ragaṇa the metre is called Pabhaddaka (Sk. Prabhadraka).

E.g.,

— — — / — ~ — / ~ — — / — ~ — / ~ — ~ .

Atthi (16 letters).

52. Najabhajarā sadā bhavati Vāṇinī gayuttā.

If there are a Nagaṇa, a Jagaṇa, a Bhagaṇa, a Jagaṇa, and a Ragaṇa with a Guru the metre is called Vāṇinī.

E.g.,

— — — / — ~ — / ~ — — / — ~ — / ~ — ~ / ~ .

N.B.—In a certain edition of the *Vṛttaratnākara*, in the place of *Ragaṇa* of this metre *Tagaṇa* is given. Then the line will stand as follows :—

— — — / — ∪ — / ∪ — — / — ∪ — / ∪ ∪ — $\frac{1}{2}$ ∪.

Accat̃thi (17 letters).

53. Yamā no so bhalgā rasaharavirāmā Sikharinī.

If there are Ya, Ma, Na, Sa, Bha Gaṇas with a Laghu and a Guru, and if there are pauses after six and eleven letters the metre is called Sikharinī.

E.g.,

— ∪ ∪ / ∪ ∪ ∪ / , — — — / — — ∪ / ∪ — — / — / ∪ .

(Rasa=6. Hara =11.)

54. Rasayugisito no so mraslāg yadā Hariṇī tadā.

In a line if there are pauses after six, four and seven letters, and again, if there are Na, Sa, Ma, Ra, Sa Gaṇas with a Laghu and a Guru, the metre is called Hariṇī.

E.g.,

$$- - - / - - \cup / \cup \cup \cup / \cup - \cup / - - \cup / - / \cup.$$

55. Mandakkantā mabhanatatagā go yugutvassakehi.

If there are Ma, Bha, Na, Ta, Ta Gaṇas and two Gurus in a line, and if there are also pauses after four, six and seven letters the metre is called Mandakkantā (Sk. Mandākṛantā).

E.g.;

$\cup \cup \cup / \cup - - / - - - / \cup \cup - / \cup \cup - / \cup / \cup .$

(Yuga = 4, Utu = 6, Assa = 7.)

Dhuti (18 letters).

56. Mo to no yo yā Kusumitalatāvellitakkhutvisihi.

If there are Magaṇa, Tagana, Nagana, and three Yagaṇas and pauses after five, six and seven letters respectively the metre is called Kusumitalatāvellitā.

E.g.,

— — — / — — — / — — — / — — — / — — — / — — — .

(*Akkha*=5. *Utu*=6. *Isi*=7.)

*Atidhuti*¹ (19 letters).

57. Rasutvassehiymā nasararagurū Meghavipphūjitā sā.

If there are pauses after six, and again six and seven letters, and also Ya, Ma, Na, Sa, Ra, Ra Gaṇas and a Guru in a line, the metre is called Meghavipphūjitā (Sk. Megha-visphūrjitā).

E.g.,

— — — / — — — / — — — / — — — / — — — / — — — / — — — .

58. Akkassehi Yadimsajā satatagā Saddūlavikkīlitaṃ.

If there are pauses in a line after twelve and seven letters, and also Ma, Sa, Ja, Sa, Ta, Ta Gaṇas and a Guru, the metre is called Saddūlavikkīlita (Sk. Sārdūlavikrīḍita).

E.g.,

— — — / — — — / — — — / — — — / — — — / — — — / — — — .

(*Akka*=12.)

Kaṭi (20 letters).

59. Vuttamīdisantu nāmato rajā rajā rajā gurū lahū ca.

¹ These terms may also stand in Pāli Dhiti and atidhiti.

CATUTTHO PARICCHEDO.

FOURTH CHAPTER.

1. Visame yadi sã salagã same,
Bhattayato gurukã Upacittam.

If there are three Saganas and a Laghu and a Guru in the odd lines, and three Bhaganas followed by two Gurus in the even lines, the metre is called Upacitta (Sk. Upacitra).

E.g.,

— — ∪ / — — ∪ / — — ∪ / — / ∪ ,

∪ — — / ∪ — — / ∪ — — / ∪ / ∪ .

2. Bhattayato yadi gã Dutamajjhã
Yadi punareva bhavanti najãjyã.

If there are two Gurus after three Bhaganas (in the odd lines), and one Nagana, two Jaganas and a Yagana (in the even lines), the metre is called Dutamajjhã (Sk. Drutamadhya).

E.g.,

∪ — — / ∪ — — / ∪ — — / ∪ / ∪ ,

— — — / — ∪ — / — ∪ — / — ∪ ∪ .

3. Yadi sattitayam guruyuttam,
Vegavatī yadi bhattitayā gā.

If there are three Saganas with a Guru (in the odd lines) and three Bhaganas and two Gurus (in the even lines) the metre is called Vegavati.

E.g.,

— — ∪ / — — ∪ / — — ∪ / ∪ ,
 ∪ — — / ∪ — — / ∪ — — / ∪ / ∪ .

4. To jo visame rato Gurū ca,
 Msā jgā Bhaddavirājamettha go ce.

If there are Ta, Ja, Ra Gaṇas and a Guru in the odd lines, and Ma, Sa, Ja Gaṇas and two Gurus in the even lines, the metre is called Bhaddavirāja (Sk. Bhadravirad).

E.g.,

∪ ∪ — / — ∪ — / ∪ — ∪ / ∪ ,
 ∪ ∪ ∪ / — — ∪ / — ∪ — / ∪ / ∪ .

5. Visame saajā saguruyuttā.
 Ketumatī same bharanagā go.

If there are Sa, Ja, Sa Gaṇas and a Guru in the odd lines, and Bha, Ra, Na Gaṇas and two Gurus in the even lines, the metre is called Ketumatī.

E.g.,

— — ∪ / — ∪ — / — — ∪ / ∪ ,
 ∪ — — / ∪ — ∪ / — — — / ∪ / ∪ .

6. Akhyātikā tā visame jagā go,
 Jatā jagā go tu same'tha pāde.

If there are two Tagaṇas, one Jagāṇa, and two Gurus in the odd lines, and a Jagāṇa, a Tagaṇa, and a Jagāṇa and two Gurus in the even lines, the metre is called Akyātikā.

(Some read as Akhyānikā (Sk. Akhyātakī or Akhyānakī).

E.g.,

∪ ∪ — / ∪ ∪ — / — ∪ — / ∪ / ∪ ,
 — ∪ — / ∪ ∪ — / — ∪ — / ∪ / ∪ .

7. Jatā jagā go visame same tu,
Tā jo gagā ce viparītapubbā.

If there are Ja, Ta, Ja Gaṇas and two Gurus in the odd lines, and two Tagaṇas, one Jagāṇa and two Gurus in the even lines the metre is called Viparītākhyātikā.

(Or Viparītākhyānikā. See above.)

E.g.,

— — — / — — — / — — — / — / — ,
— — — / — — — / — — — / — / — .

8. Sasato salagā visame same,
Nabhabharā bhavati Hariṇaplutā.

If there are three Sagaṇas and a Laghu and a Guru in the odd lines, and one Nagaṇa, two Bhagaṇas and a Ragaṇa in the even lines, the metre is called Hariṇaplutā.

E.g.,

— — — / — — — / — — — / — / — ,
— — — / — — — / — — — / — — — .

9. Yadi nanaralagā najā jarā,
Yadi ca tadā'paravattamicchatī.

If there are two Nagaṇas, one Ragaṇa and a Laghu and a Guru (in the odd lines), and one Nagaṇa, two Jagaṇas, and one Ragaṇa (in the even lines), the metre is called Aparavatta (Sk. Aparavaktra).

E.g.,

— — — / — — — / — — — / — / — ,
— — — / — — — / — — — / — — — .

10. Visamamupagatā nanā rayā ce,
Najajaragā samake ca Pupphitaggā.

If there are two Nagaṇas, one Ragaṇa and one Yagaṇa in the odd lines, and one Nagaṇa, two Jagaṇas, one Ragaṇa and a Guru in the even lines the metre is called Pupphitaggā (Sk. Puṣpitāgrā).

E.g.,

— — — / — — — / — — — / — — — ,
— — — / — — — / — — — / — — — / — — — .

11. Sā yavādikā matī rajā rajā tu,
Same'same jarā jarā gurū bhaveyyum.

If there are two sets of Ragaṇa-Jagaṇas in the odd lines and again two sets of Jagaṇa-Ragaṇas and a Guru in the even lines, the metre is called Yavamatī.

E.g.,

— — — / — — — / — — — / — — — ,
— — — / — — — / — — — / — — — .

Iti Addhasamavutta paricchedo catuttho.

Thus ends the fourth Chapter which deals with metres that are partly regular.

PAÑCAMO PARICCHEDO.

¹ FIFTH CHAPTER.

1. Naṭṭhakkhāresu pādesu,
Snādimhā yonṇavā Vattam

In a line of eight letters if there is neither a Sagaṇa nor a Nagana after the first letter, but there is a Yaṇa after the first four letters, the metre is called Vatta (Sk. Vaktra).

E.g.,

Ya

— — — — / — — — — / —,
— — — — / — — — — / —.

2. Samesu sindhuto jena
Pathyāvattam pakittitam.

In even lines if there is a Jagana after the first four letters (all others being like the preceding one) the metre is called Pathyāvatta (Sk. Pathyāvaktra).

E.g.,

— — — — / — — — — / —,

Ja

— — — — / — — — — / —.

3. Ojesu jena sindhuto,
Tameva viparītādi.

If there is a Jagana in odd lines (after the first four letters) the metre is called Viparītapathyāvatta.

¹ This chapter is placed among those of Mattāvuttas in the Vṛttaratnākara. It is to be found there just before Mātrasamaka and has been called Anustupprakaraṇa or Vaktra-prakarana.

E.g.,

Ja

— — — — / — — — — / — ,
 — — — — / — — — — / —

4. Nakāro ce jaladhito,
 Capalāvattamiccetam.

If there is a Nagāṇa (after the first four letters in the odd lines) it is called Capalāvatta (Sk. Capalāvakra).

E.g.,

Na

— — — — / — — — — / — ,
 — — — — / — — — — / —

5. Same lo sattame yassā,
 Vipulā Piṅgalassa sā.

If in the even lines of the above metre the seventh letter is a Laghu it is the Vipulā of Piṅgala.

E.g.,

— — — — / — — — — / — ,
L
 — — — — — — / — — — — / —

N.B.—These sets of lines must be doubled to get complete verses.

6. Setavassākhilesupi.

In the opinion of Setava (Sk. Saitava) there should be a Laghu in the seventh place in all the four lines in order that the metre be called a Vipulā.

7. Bhenannavā tabbipulā.

If there is a Bhagaṇa after the first four letters in each line the metre is called Bhavipulā.

E.g.,

Bha

— — — — / — — — — / — ,
 — — — — / — — — — / —

8. Evamaññā ro catutthā.

The other one in which there is a Ragana after the first four letters is also thus named (*i.e.*, Ravipulā).

E.g., Ra
 — — — — / — — — / —

9. No'ṇṇavā Navipulā.

If after the first four letters there is a Nagana the metre is called Navipulā.

E.g., Na
 — — — — / — — — / —

10. To'ṇṇavā tathā'ññā siyā.

Another one in which there is a Tagana after the first four letters is named as such (*i.e.*, Tavipulā).

E.g., Ta
 — — — — / — — — / —

N.B.—All these lines must be quadrupled to make complete verses.

11. Nadissatettha yaṃ chandaṃ,
 Payoge dissate yadi,
 Visamakharapādantaṃ,
 Gāthā sāmāññānāmato.

If there is any Chanda (*i.e.*, a metre—and therefore a verse of a particular metre) that is not seen here, but seen in usage, it, having lines of irregular letters, is called by the general name of Gāthā.

Iti Visamavuttaparichedo pañcamo.

Thus ends the fifth Chapter dealing with irregular metres.

CHAṬṬHO PARICCHEDO

SIXTH CHAPTER.

Patthāra[̄]avidhi.

The method of Tabulation.

1. Patthāre sabbage pāde,
Pubbagādholpare samā,
Pubbegurutvevamime,
Kattabbā yāva sabbalo.

In Patthāra (*i.e.*, Tabulation), under the first Guru of the line consisting of Gurus only, there should be a Laghu. After it, all must be the same as above. Before it there should be only Gurus. This should be repeated till the line consisting of Laghus only is arrived at.

Explanation.

Patthāra is the method by which the different Vuttas of a Chanda is found out. This is something like permutation and combination in Algebra. This is done in the following way:

1. First of all write down the line that contains Gurus only.

2. Then write a Laghu under the first Guru.

It is to be noted that the first Guru, though it occupies the first place in the first line, may occupy any other place in other lines.

3. The spaces (if any) on the right hand side of the Laghu, should always be filled up with Laghus and Gurus

just according as those in the corresponding spaces of the preceding line.

4. But the spaces (if any) on the left hand side of the Laghu must be filled up with Gurus only irrespective of what the corresponding spaces in the above line contain.

5. Continue in this way till the line which contains only Laghus is arrived at.

For example :

Take the line that contains Gurus only of the Chanda called Suppatitthā (*i.e.*, the Chanda of five letters). It will stand as — — — — —.

Now, write down a Laghu under the first Guru of this line, and fill up the remaining four places with Gurus, because there are Gurus only in the corresponding places of the above line. It will then stand as — — — — —.

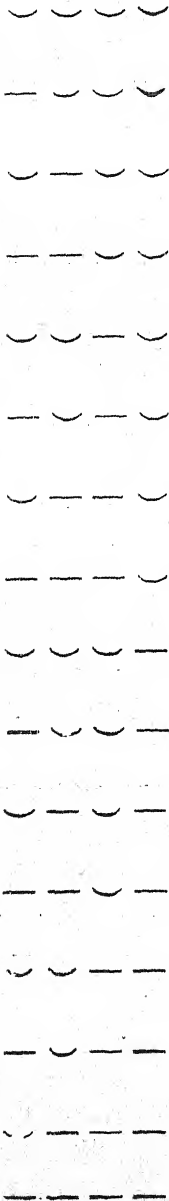
Again write a Laghu under the first Guru of this line. (Now the first Guru of this line occupies the second place of the line.) Fill up the right hand side of this with three Gurus as above. But the space on the left hand side must be filled up with a Guru irrespective of the Laghu that occupies the corresponding place in the preceding line. It will then stand as — — — — —.

The fourth line, similarly, will be — — — — —. Here the first Laghu occupies the place under the first Guru of the above line. The second Laghu is written to correspond with the Laghu in the same place of the line above. The three Gurus that come after these Laghus have been written down in accordance with those in the above line.

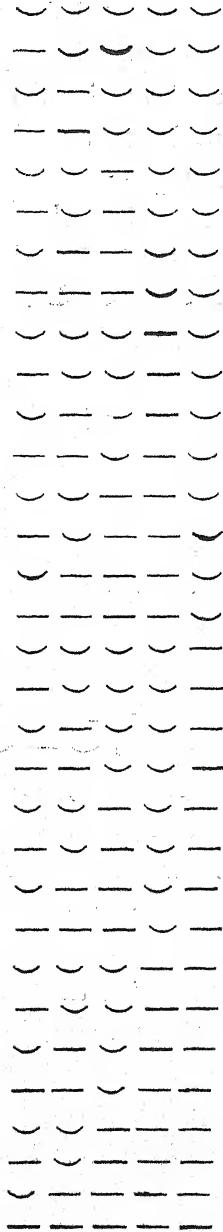
The fifth line would be — — — — —. Here the Laghu that occupies the third place is the one written under the first Guru of the fourth line, and the two Gurus on the right hand side of it are written down corresponding to the two Gurus in the above line. The two Gurus on the left hand side of it are those that are written to fill up the remaining spaces irrespective of what the preceding line contains.

The complete Patthāra of this Chanda (Suppatitthā) and also that of four letters (*i.e.*, Patitthā) is given below.

Patitthā



Suppatitthā



Points to be remembered :—

1. First of all write the line that contains Gurus only.
2. Write a Laghu always under the first Guru.
3. The right hand side of the Laghu should be filled up with the Gurus or the Laghus as the preceding line.
4. The left hand side of the Laghu should be filled up only with Gurus.
5. Repeat this till the line containing Laghus only is arrived at. In the Patthāra of Patitṭhā which is a Chanda of four letters given above the first line is the Vutta which has only Gurus. Then writing a Laghu under the first Guru we get the line which contains a Laghu at the beginning and then three Gurus. Then by writing a Laghu under the first Guru of that line, which is of course the second letter of the line we get the third line having a Guru at the beginning and then a Laghu and following it two Gurus. Here the first Guru has come according to the rule that the left hand side should be filled up by only Gurus. Then in the fourth line we have two Laghus at the beginning and then two Gurus. Here the first Laghu we get according to the rule of writing a Laghu under the first Guru of the preceding line, and the second Laghu comes according to the rule of filling up the right hand side in accordance with the Gurus or Laghus that the preceding line contains. Thus all the succeeding lines should be traced till we come to the line which does not contain any more Guru under which to write a Laghu.

Iti Pattharavidhi.

Thus ends the method of Tabulation.

Naṭṭhavidhi.

The method of finding out the arrangement of Gurus and Laghus of a particular Vutta in a given Chanda.

2. Naṭṭhassa yo bhavēyyaṅko, tasmim loddhikate same Visame tvekasahite, Bhavēyyaddhikate guru.

When the serial number of the lost Vutta is divided by two, write a Laghu in case if the dividend is an even number ; and if the number is an odd one add one to it and divide it by two and write a Guru.

Explanation.

Natṭha means that which is lost or unknown. Therefore Natṭhavidhi means the method by which we find out the arrangement of Gurus and Laghus in a given Vutta of a given Chanda.

The method followed in this case is to divide the serial number of the Vutta by two and to write a Laghu if the dividend is an even number, and a Guru if it is an odd number, and to repeat this till the number of letters that the particular Chanda contains is obtained, adding one in every case when the quotient is an odd number so that it may be divided by two without leaving a remainder.

For instance, if any one wants to know what will be the form of the sixth Vutta of the Chanda of five letters, *i.e.*, Suppatitṭhā, he should proceed thus :—

1. The serial number of the Vutta of which we want to know the form is 6 ; therefore write 6.
2. Divide this by 2.
3. Now, as the dividend is an even number write a Laghu.
4. Our quotient is 3.
5. This is an odd number and therefore cannot be divided by 2 without leaving a remainder. So add 1 to it and divide by 2. But as our original dividend here is an odd number write a Guru. Thus we get a Laghu and a Guru as the first and the second letters of the Vutta.
6. Now, our quotient is 2. Divide this by 2, and write a Laghu.
7. Then the quotient is 1 ; add 1 to this and divide by 2, and write a Guru. The next step will be the same as this. Thus we have come to the 5th letter. Now we should stop,

because the Chanda to which the Vutta belongs contains only five letters.

Thus the Vutta we want will stand as, — ◡ — ◡ ◡ .
We can test the correctness of this result by comparing it with the table in p. 46.

Iti Natthavidhi.

Thus ends the method of finding out the lost metre.

Udditthavidhi.

The method of finding out the place of a Vutta in the Patthāra of its Chanda.

3. Ekādinukkamenanke, pubbādho diguṇe likhe;
Missitehi lahuṭṭhehi, sekehudditthakambhave.

Numbers from one multiplied by two successively should be written in order in all the places of the letters from the beginning to the end of the given line. Then, the sum of the numbers that stand in the places of Laghus increased by one is the Udditthaka (or the serial number of the given Vutta in the table of the Patthāra of its Chanda).

Uddittha means that which is meant or given. Udditthavidhi, therefore, means the method of finding out the place that a given Vutta occupies in the tabulation of its Chanda.

The procedure in this case is as follows:—

First write the Gurus and Laghus of the Vutta in a line. Then write 1 above the first letter. Next write the double of 1, *i.e.*, 2, over the next letter. Then write the double of 2, *i.e.*, 4, over the third letter. In this way go on till the last letter of the line. Then add together all the numbers that stand over the Laghus. To this sum, again, add 1. This is the number which indicates the place of the Vutta in the tabulation of its Chanda.

For instance, let $\cup - - \cup -$ be the Vutta given. Now, to find out its place in the Tabulation (Patthāra) of its Chanda proceed thus:—First write 1 above the first letter, then 2 above the second, then 4 above the third, and 8 above the fourth and then 16 above the fifth, thus multiplying the numbers by 2 in each time. Then find out the numbers that stand above the Laghus. They are 2, 4, and 16 in this case. Now, add them together. Then the sum would be 22. To this sum add 1 more. The result is 23. So the Vutta is the 23rd in the table. (By comparing this with the table on p. 46 the correctness of this can be tested).

Iti Uddiṭṭhavidhi.

[Thus ends the method of finding out the place of a given Vutta in the Patthāra of its Chanda.

Lagakriyavidhi.

The method of finding out the number of Vuttas of different type in a given Chanda.

4. Vuttakkharasamā sankhyā, likhya sekoparūpari,
Ekekahīnamekādi, nuṭṭhāne sabbagādikaṃ.

One above another, write as many units as there are letters in the Chanda with one unit more. Then, by adding together these (one to the other) leaving only the last one, we get the number of Vuttas such as Sabba-Guru Vutta, etc., in a particular Chanda.

Lagakriyā is the method by which the number of Vuttas of different forms in a Chanda is found out.

If any one wants to know how many Vuttas there are in a particular Chanda and how many of them are Sabba-laghu, and how many are Sabba-guru and so on, he should proceed thus:—

First let him write as many units as there are letters in the given Vutta one above the other, and then one more unit.

Then let him add these units together one to the other. The line of numbers thus got is again added, and this method is repeated till there will be no two numbers left. It is to be remembered that in adding the numbers the last number must always be left out.

For instance, if any one wants to know how many different Vuttas there are in Suppatitthā, that is the Chanda which has five letters, he should proceed thus:—

First, write down six units one above the other. Then add them together one to the other beginning from the unit at the top as shown below:—

$$1+1+1=3.$$

$$1+1+1+1=4.$$

$$1+1+1+1+1=5.$$

Stop here leaving away the last unit. And again add these numbers from the unit at the top : as

$$1+2=3.$$

$$1+2+3=6.$$

$$1+2+3+4=10.$$

Again stop here leaving away the last figure, that is 5, and begin anew from the units at the top : as

$$1+3=4,$$

$$1+3+6=10.$$

Stop here also, and begin again from the top ; as

$$1+4=5.$$

Stop here finally as there is no way to proceed further according to the instructions given above.

This when arranged in a tabular form would stand thus :

1
1 2 3 4 5
1 3 6 10
1 4 10
1 5
1

Thus we have obtained, 1,5,10,10,5,1, as the result. Here the first number, that is 1, at the top of this series indicates that there is only 1 Sabba-guru Vutta.¹ The second number, that is 5, indicates that there are 5 Catu-guru Vuttas.² The third number, that is 10, indicates that there are 10 Ti-guru³ Vuttas. The fourth number, that is also 10, indicates that there are 10 Dvi-guru⁴ Vuttas. The fifth number, that is 5, indicates that there are 5 Eka-guru Vuttas.⁵ The sixth number, that is 1 at the bottom, indicates that there is 1 Sabbalahu Vutta.⁶

We have counted here Sabba-guru Vutta, Catu-guru Vutta, etc., from the top. Similarly we can get the number of Sabbalahu Vutta, Catu-lahu Vutta, Ti-lahu Vutta, etc., by counting from the bottom.

It is to be noted here that the counting of the Guru Vuttas from the top, and the Laghu Vuttas from the bottom is only a custom followed by the old prosodists. We see that the result is the same whether we count them from the top or from the bottom.

Iti Lagakriyāvidhi.

Thus ends the method of finding out the number of Vuttas of different Guru-laghu arrangements in a given Chanda.

¹ A metre having Gurus only.

² " " " four Gurus.

³ " " " three Gurus.

⁴ A metre having two Gurus.

⁵ " " " one Gurn.

⁶ " " " Laghus only.

Vuttasāṅkhyāvidhi.

The method of finding out the total number of Vuttas in a given Chanda.

5. ¹Lagakriyāṅkasandohe—bhave saṅkyā vimissite,
Uddiṭṭhaṅkasamāhāro—seko ve maṃ samānaye.

The total number (of the Vuttas of a Chanda) will be (what is got) by adding the numbers that are in Lagakriyā.¹ Or the sum of the numbers in Uddiṭṭha with one more will also give this number.

The above is the method by which we can get the total number of Vuttas in a given Chanda.

If we want to know what is the total number of a particular Chanda we can get it either by adding the numbers in Lagakriyā, or by adding the numbers in the Uddiṭṭha and increasing it by one.

For instance, the numbers that we got above in the Lagakriyā of the Chanda of five letters is, from top to bottom, 1,5,10,10,5,1. Now, their sum is 32. Then this is the number of Vuttas that the particular Chanda contains.

Again, in the Uddiṭṭha of the same Chanda we had 1,2,4,8,16. Now, their sum is 31. When we add 1 to this sum it will be 32. This is just the same as the above.

Iti Vuttasāṅkhyāvidhi.

Thus ends the method of finding out the number of Vuttas in a Chanda.

Pattharabhūmimānavidhi.

The method of finding out the space that will be occupied by the Patthāra of a Chanda.

¹ In the Vuttodaya and in its Tikā the term Gurukriyā is used for the term Lagakriyā. But the term Lagakriyā is the one generally used and the more appropriate

6. Saṅkhyeva dviguṇekūna—Vitthārāyāmasambhavo,
Vuttassaddhantarānañca—garulānañca aṅgulaṃ.

¹The space occupied by a Chanda is the same as the number of Vuttas of it multiplied by two and minus one in inches. There should be one inch between (each two lines) and between each two Gurus or Laghus (*i.e.*, between two letters).

Iti Patthārabhūmimānavidhi.

Thus ends the method of measuring the space that is required for writing down a Patthāra.

Iti² Chappaccayavibhāgo nāma chaṭṭho paricchedo.

Thus ends the sixth Chapter dealing with Chappaccaya.

Iti Saṅgharakkhitattherapāḍaviracitaṃ Vuttodayaṃ Niṭṭhitaṃ.

Thus ends the Vuttodaya composed by the Venerable Saṅgharakhita Thera.

¹ In ancient days it was the custom in India to write down those things either on sands or on the specially prepared ground. Hence the mention of inches.

² Patthāro natthamuddiṭṭhamekadvāḍilagakriyā,
Saṅkhyānamaddhayogo ca—chaḷeṭe paccayā matā.